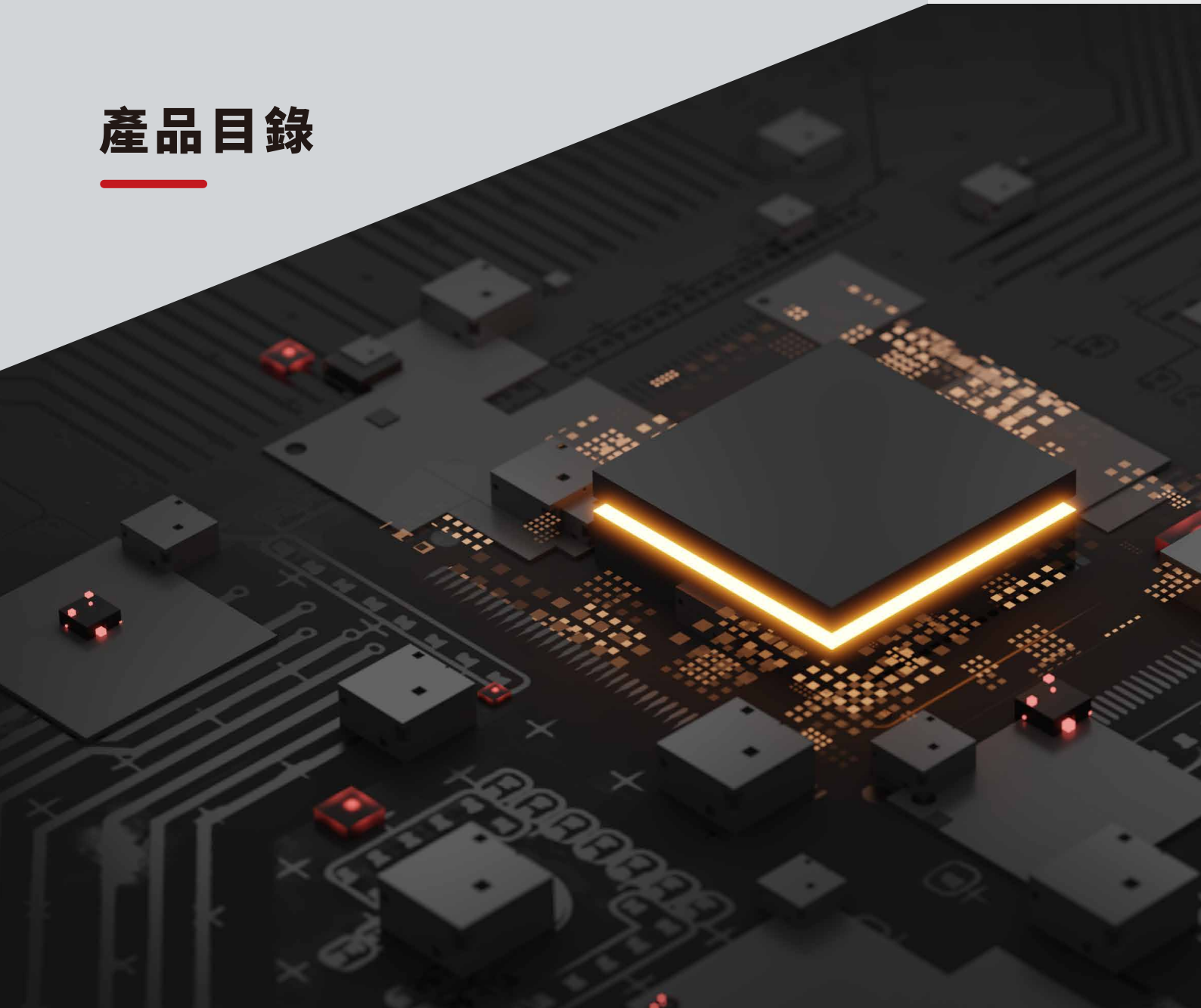


# ITG SEMI GROUP SELECTION GUIDE

產品目錄

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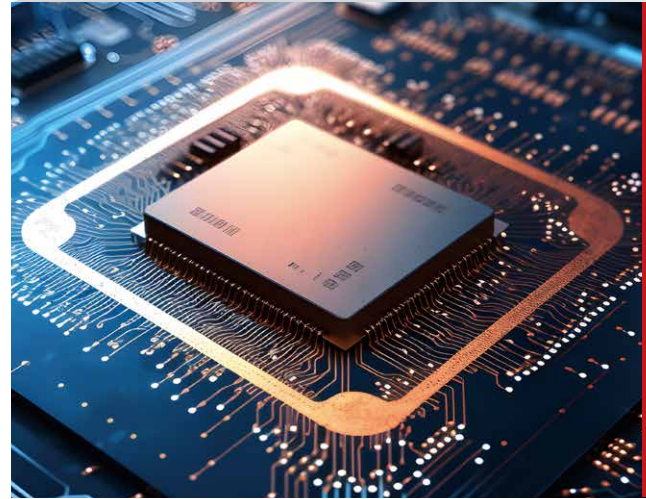


**ITG SEMI GROUP PTE. LTD.**

ITG SEMI GROUP是一家總部位於新加坡的半導體公司，專注於研究、開發，以及IC、半導體器件和解決方案的銷售。

ITG與頂級虛擬IDM設計公司、工廠和投資公司進行戰略合作，向全球客戶提供基於ITG自有的BCD工藝產品。

ITG產品系列擁有600多種產品，主要類別包括功率模擬、信號鏈、混合信號模擬前端和嵌入式處理器。應用範圍覆蓋了計算、汽車、工業、新能源、通訊和PE市場等廣泛的行業領域。作為一家專注於研發的公司，ITG持續投資於優秀的設計團隊，以建立自己的專利組合。



### 目標與願景

—  
成為亞洲領先、  
世界一流的模擬半導體公司。

### 使命

—  
ITG致力於提供高性能、高質量和高可靠性的集成電路(IC)產品，  
並通過提供先進的解決方案，助力客戶成功。

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# Switching DCDC Power Supply

Step-down Converter VIN Max <10V

| P/N       | Package                      | Regulated Outputs | V <sub>IN</sub> (V) | I <sub>OUT</sub> (A) | V <sub>FB</sub> (V) | I <sub>Q</sub> (uA) | F <sub>SW</sub> (kHz) | Soft Start | Power Good | Light Load | Sync | Control Method |
|-----------|------------------------------|-------------------|---------------------|----------------------|---------------------|---------------------|-----------------------|------------|------------|------------|------|----------------|
| ITG5711   | WLCSP8                       | 1                 | 2.5~5.5             | 0.3                  | 1.2~3.3             | 0.36                | 1000                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5711A  | WLCSP8                       | 1                 | 2.5~5.5             | 0.3                  | 0.7~3.1             | 0.36                | 1000                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5716   | DFN3×2-12                    | 2                 | 2.5~5.5             | 0.3                  | 0.7~3.3             | 0.36                | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5710   | DFN3×2-12                    | 2                 | 3.3~10              | 0.4                  | 1.8~3.3             | 0.4                 | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5715   | DFN3×2-12                    | 2                 | 3.3~10              | 0.4                  | 1.8~3.3             | 0.4                 | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5712   | WLCSP8                       | 1                 | 2.3~5.5             | 0.6                  | 1.2~3.3             | 0.36                | 1200                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5712A  | WLCSP8                       | 1                 | 2.3~5.5             | 0.6                  | 0.7~3.1             | 0.36                | 1200                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5717   | DFN3×2-12                    | 2                 | 2.3~5.5             | 1.2                  | 0.7~3.3             | 0.36                | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5250A  | SOT23-5                      | 1                 | 2.7~6               | 1                    | 0.6                 | 40                  | 1500                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5250S  | SOT23-5 / SOT563             | 1                 | 2.7~6               | 1                    | 0.6                 | 40                  | 1500                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5291   | SOT563                       | 1                 | 2.7~6               | 1                    | 0.6                 | 40                  | 1500                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5291P  | SOT563                       | 1                 | 2.7~6               | 1                    | 0.6                 | 40                  | 1500                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5291F  | SOT563                       | 1                 | 2.7~6               | 1                    | 0.6                 | 40                  | 1500                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5291PF | SOT563                       | 1                 | 2.7~6               | 1                    | 0.6                 | 40                  | 1500                  | Internal   | Y          | FCCM       | Y    | COT            |
| ITG5256   | SOT23-5                      | 1                 | 2.7~6               | 1.2                  | 0.6                 | 40                  | 1500                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5211   | SOT23-5 / SOT23-6            | 1                 | 2.5~6               | 1.2                  | 0.6                 | 50                  | 1500                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITG5262C  | SOT23-5 / SOT23-6            | 1                 | 2.6~6               | 1.5                  | 0.6                 | 40                  | 1500                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5262CM | SOT23-5 / SOT23-6            | 1                 | 2.6~6               | 1.5                  | 0.6                 | 40                  | 1500                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5262CF | SOT23-5 / SOT23-6            | 1                 | 2.6~6               | 1.5                  | 0.6                 | 40                  | 1500                  | Internal   | N/Y        | FCCM       | Y    | COT            |
| ITG5231   | SOT23-5 / SOT23-6            | 1                 | 2.5~5.5             | 1.5                  | 0.6                 | 50                  | 1500                  | Internal   | Y          | FCCM       | Y    | PCM            |
| ITG5217   | DFN2×2-8                     | 1                 | 2.5~6               | 2                    | 0.45                | 30                  | 2000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5292   | SOT563                       | 1                 | 2.7~6               | 2                    | 0.6                 | 47                  | 1850                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5292P  | SOT563                       | 1                 | 2.7~6               | 2                    | 0.6                 | 47                  | 1850                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5292F  | SOT563                       | 1                 | 2.7~6               | 2                    | 0.6                 | 47                  | 1850                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5292PF | SOT563                       | 1                 | 2.7~6               | 2                    | 0.6                 | 47                  | 1850                  | Internal   | Y          | FCCM       | Y    | COT            |
| ITG5223   | SOT23-5 / SOT23-6            | 1                 | 2.5~6               | 2                    | 0.6                 | 40                  | 1500                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITG5252   | SOT23-5 / TSOT23-8 / SOT23-6 | 1                 | 2.5~6               | 2                    | 0.6                 | 60                  | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5262N  | SOT23-5 / SOT23-6            | 1                 | 2.6~6               | 2                    | 0.6                 | 40                  | 1500                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5262NM | SOT23-5 / SOT23-6            | 1                 | 2.6~6               | 2                    | 0.6                 | 40                  | 1500                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5262   | SOT23-5 / SOT23-6            | 1                 | 2.7~6               | 2.5                  | 0.6                 | 40                  | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5262L  | SOT23-5 / SOT23-6            | 1                 | 2.7~6               | 2.5                  | 0.6                 | 40                  | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5222N  | SOT23-6                      | 1                 | 2.5~6               | 2.5                  | 0.6                 | 60                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITG5222R  | SOT23-6                      | 1                 | 2.5~6               | 2.5                  | 0.6                 | 60                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITG5213H  | DFN 2×2-8                    | 1                 | 2.5~6               | 3                    | 0.6                 | 50                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITG5213L  | DFN 2×2-8                    | 1                 | 2.5~6               | 3                    | 0.6                 | 50                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITG5263SH | DFN 2×2-8                    | 1                 | 2.5~6               | 3                    | 0.6                 | 50                  | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5263SL | DFN 2×2-8                    | 1                 | 2.5~6               | 3                    | 0.6                 | 50                  | 1000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5219   | QFN1.5×1.5-7                 | 1                 | 2.5~5.5             | 3                    | 0.6                 | 65                  | 1500                  | Adjustable | N          | FCCM       | Y    | COT            |
| ITG5219P  | QFN1.5×1.5-7                 | 1                 | 2.5~5.5             | 3                    | 0.6                 | 65                  | 1500                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5293   | SOT563                       | 1                 | 2.7~6               | 3                    | 0.6                 | 40                  | 1500                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5293P  | SOT563                       | 1                 | 2.7~6               | 3                    | 0.6                 | 40                  | 1500                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5293F  | SOT563                       | 1                 | 2.7~6               | 3                    | 0.6                 | 40                  | 1500                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5293PF | SOT563                       | 1                 | 2.7~6               | 3                    | 0.6                 | 40                  | 1500                  | Internal   | Y          | FCCM       | Y    | COT            |
| ITGH5280  | DFN2×2-7                     | 1                 | 2.5~6               | 3                    | 0.8                 | 40                  | 2000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITG5255A  | DFN3×3-10                    | 1                 | 2.5~5.5             | 5                    | 0.6                 | 60                  | 1000                  | Adjustable | Y          | PFM        | Y    | COT            |
| ITG5265   | DFN3×3-10                    | 1                 | 2.5~5.5             | 5                    | 0.6                 | 60                  | 1000                  | Adjustable | Y          | PFM        | Y    | COT            |
| ITG5265F  | DFN3×3-10                    | 1                 | 2.5~5.5             | 5                    | 0.6                 | 60                  | 1000                  | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGH5276  | QFN3×3-16                    | 1                 | 2.95~7              | 6                    | 0.6                 | 210                 | 400~2400              | Adjustable | Y          | FCCM       | Y    | COT            |

## Step-down Converter VIN Max &gt;10V

| P/N        | Package           | Regulated Outputs | V <sub>IN</sub> (V) | I <sub>OUT</sub> (A) | V <sub>FB</sub> (V) | I <sub>O</sub> (uA) | F <sub>SW</sub> (kHz) | Soft Start | Power Good | Light Load | Sync | Control Method |
|------------|-------------------|-------------------|---------------------|----------------------|---------------------|---------------------|-----------------------|------------|------------|------------|------|----------------|
| ITG5033C   | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.8                 | 100                 | 700                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5052C   | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.6                 | 100                 | 700                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5059TC  | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.765               | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5059TF  | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.765               | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5092    | TSOT23-6 / SOT563 | 1                 | 3.7~18              | 2                    | 0.8                 | 120                 | 800                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5352    | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.6                 | 140                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5352H   | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.6                 | 140                 | 1140                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5352HF  | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.6                 | 140                 | 1140                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5352HM  | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.6                 | 140                 | 1140                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5352M   | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.6                 | 140                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5359    | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.765               | 140                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5359M   | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.765               | 140                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5359F   | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.765               | 140                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5359FM  | SOT23-6           | 1                 | 4.5~18              | 2                    | 0.765               | 140                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5360    | DFN2x2-6          | 1                 | 4.5~18              | 2                    | 0.6                 | 140                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5092A   | SOT563            | 1                 | 4.5~18              | 2                    | 0.8                 | 140                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5092H   | SOT563            | 1                 | 4.5~18              | 2                    | 0.8                 | 140                 | 1000                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5092AF  | SOT563            | 1                 | 4.5~18              | 2                    | 0.8                 | 140                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5362H   | SOT563            | 1                 | 4.5~18              | 2                    | 0.6                 | 150                 | 1200                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5362HF  | SOT563            | 1                 | 4.5~18              | 2                    | 0.6                 | 150                 | 1200                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5392    | SOT563            | 1                 | 4.5~18              | 2                    | 0.8                 | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5392F   | SOT563            | 1                 | 4.5~18              | 2                    | 0.8                 | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5392H   | SOT563            | 1                 | 4.5~18              | 2                    | 0.8                 | 150                 | 1200                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5392HF  | SOT563            | 1                 | 4.5~18              | 2                    | 0.8                 | 150                 | 1200                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5357    | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5357M   | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5357H   | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 1140                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5357HF  | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 1140                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5357HM  | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 1140                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5061TC  | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5061TF  | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5361    | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5361M   | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5361F   | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5361FM  | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5361H   | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 1200                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5361HM  | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 1200                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5361HF  | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 1200                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5361HFM | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 1200                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5040    | SOT563 / TSOT23-6 | 1                 | 3.8~18              | 3                    | 0.8                 | 120                 | 500                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5040C   | SOT23-6           | 1                 | 4.5~16              | 3                    | 0.8                 | 100                 | 500                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5057C   | SOT23-6           | 1                 | 4.5~16              | 3                    | 0.6                 | 100                 | 500                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5058S   | SOT23-6           | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 1000                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5093    | SOT563            | 1                 | 4.5~18              | 3                    | 0.8                 | 140                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5371    | TSOT23-6          | 1                 | 4.5~18              | 3                    | 0.765               | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5371F   | TSOT23-6          | 1                 | 4.5~18              | 3                    | 0.8                 | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5393C   | SOT563            | 1                 | 4.5~18              | 3                    | 0.8                 | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5393CF  | SOT563            | 1                 | 4.5~18              | 3                    | 0.8                 | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5393    | SOT563            | 1                 | 4.5~18              | 3                    | 0.8                 | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5393F   | SOT563            | 1                 | 4.5~18              | 3                    | 0.8                 | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5393H   | SOT563            | 1                 | 4.5~18              | 3                    | 0.8                 | 150                 | 1200                  | Internal   | N          | PFM        | Y    | COT            |
| ITG5393HF  | SOT563            | 1                 | 4.5~18              | 3                    | 0.8                 | 150                 | 1200                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5363H   | SOT563            | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 1200                  | Internal   | N          | PFM        | Y    | COT            |

## Step-down Converter VIN Max &gt;10V

| P/N        | Package             | Regulated Outputs | V <sub>IN</sub> (V) | I <sub>OUT</sub> (A) | V <sub>FB</sub> (V) | I <sub>o</sub> (uA) | F <sub>sw</sub> (kHz) | Soft Start | Power Good | Light Load | Sync | Control Method |
|------------|---------------------|-------------------|---------------------|----------------------|---------------------|---------------------|-----------------------|------------|------------|------------|------|----------------|
| ITG5363HF  | SOT563              | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 1200                  | Internal   | N          | FCCM       | Y    | COT            |
| ITG5363F   | SOT563              | 1                 | 4.5~18              | 3                    | 0.6                 | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITGH5042   | QFN3.5×3.5-14       | 1                 | 4.5~18              | 3                    | 0.8                 | 380                 | 187~1300              | Adjustable | Y          | FCCM       | Y    | PCM            |
| ITG5062T   | TSOT23-6 / TSOT23-8 | 1                 | 4~18                | 4                    | 0.765               | 260                 | 600                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5062TF  | TSOT23-6 / TSOT23-8 | 1                 | 4~18                | 4                    | 0.765               | 260                 | 600                   | Internal   | Y          | FCCM       | Y    | COT            |
| ITG5372    | TSOT23-6            | 1                 | 4.5~18              | 4                    | 0.765               | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5372F   | TSOT23-6            | 1                 | 4.5~18              | 4                    | 0.765               | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5394    | SOT563              | 1                 | 4.5~18              | 4                    | 0.8                 | 150                 | 600                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5394F   | SOT563              | 1                 | 4.5~18              | 4                    | 0.8                 | 150                 | 600                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5056    | TSOT23-6            | 1                 | 4.5~18              | 5                    | 0.76                | 130                 | 560                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5056F   | TSOT23-6            | 1                 | 4.5~18              | 5                    | 0.76                | 130                 | 560                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5305    | ESOP8               | 1                 | 4.5~18              | 5                    | 0.765               | 130                 | 580                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5305F   | ESOP8               | 1                 | 4.5~18              | 5                    | 0.765               | 130                 | 580                   | Internal   | Y          | FCCM       | Y    | COT            |
| ITG5066    | TSOT23-6            | 1                 | 4.5~18              | 6                    | 0.76                | 130                 | 560                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5066F   | TSOT23-6            | 1                 | 4.5~18              | 6                    | 0.76                | 130                 | 560                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5306    | ESOP8               | 1                 | 4.5~18              | 6                    | 0.765               | 130                 | 580                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5306F   | ESOP8               | 1                 | 4.5~18              | 6                    | 0.765               | 130                 | 580                   | Internal   | Y          | FCCM       | Y    | COT            |
| ITGH5046   | QFN3.5×3.5-14       | 1                 | 4.5~17              | 6                    | 0.6                 | 380                 | 210~1770              | Adjustable | Y          | FCCM       | Y    | PCM            |
| ITGH5083   | QFN3.5×3.5-18       | 1                 | 4.5~17              | 8                    | 0.6                 | 580                 | 400/800/1200          | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGH5084   | QFN3.5×3.5-18       | 1                 | 4.5~17              | 12                   | 0.6                 | 580                 | 400/800/1200          | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGH5085A  | QFN3×4-21           | 1                 | 2.7~16              | 12                   | 0.6                 | 620                 | 700/800/1000          | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGH5084H  | QFN3.5×3.5-18       | 1                 | 4.5~17              | 14                   | 0.6                 | 580                 | 400/800/1200          | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGH5086A  | QFN3×4-21           | 1                 | 2.7~16              | 16                   | 0.6                 | 550                 | 700/800/1000          | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGH5087A  | QFN3×4-21           | 1                 | 2.7~16              | 20                   | 0.6                 | 550                 | 700/800/1000          | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGH5087AW | QFN3×4-19           | 1                 | 2.7~16              | 20                   | 0.6                 | 550                 | 700/800/1000          | Adjustable | Y          | FCCM       | Y    | COT            |
| ITG5017F   | SOT23-6             | 1                 | 4.5~26              | 1.2                  | 0.8                 | 40                  | 1200                  | Internal   | N          | FCCM       | Y    | PCM            |
| ITG5017S   | SOT23-6             | 1                 | 4.5~26              | 1.2                  | 0.8                 | 40                  | 1200                  | Internal   | N          | PFM        | Y    | PCM            |
| ITG5027    | SOT23-6             | 1                 | 3.8~24              | 2                    | 0.8                 | 120                 | 1400                  | Internal   | N          | PFM        | Y    | PCM            |
| ITG5031S   | TSOT23-6            | 1                 | 3.7~23              | 2                    | 0.8                 | 120                 | 800                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5071    | SOT23-6             | 1                 | 4.5~28              | 2                    | 0.6                 | 120                 | 600                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5057S   | TSOT23-6            | 1                 | 4~24                | 3                    | 0.6                 | 220                 | 500                   | Internal   | N          | PFM        | Y    | COT            |
| ITG5060T   | TSOT23-6 / TSOT23-8 | 1                 | 4~24                | 3                    | 0.765               | 260                 | 800                   | Internal   | Y          | Selectable | Y    | COT            |
| ITG5060TF  | TSOT23-6            | 1                 | 4~24                | 3                    | 0.765               | 260                 | 800                   | Internal   | N          | FCCM       | Y    | COT            |
| ITG5065    | TSOT23-8            | 1                 | 4~24                | 3                    | 0.8                 | 260                 | 450                   | Internal   | N          | Selectable | Y    | COT            |
| ITG5069A   | QFN3×3-20           | 1                 | 4~23                | 6                    | 0.6                 | 45                  | 500                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5069C   | QFN3×3-20           | 2                 | 5.5~23              | 6                    | 5.1                 | 36                  | 600                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5169BS  | QFN2.5×2.5-16       | 2                 | 4~23                | 6                    | 3.35V               | 40                  | 600                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5186AU  | QFN2.5×2.5-16       | 1                 | 4~23                | 6                    | 0.6                 | 45                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5186DU  | QFN2.5×2.5-16       | 1                 | 4~23                | 6                    | 0.6                 | 45                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5186CU  | QFN2.5×2.5-16       | 2                 | 5.5~23              | 6                    | 5.1                 | 36                  | 600                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5188AU  | QFN2.5×2.5-16       | 1                 | 4~23                | 8                    | 0.6                 | 45                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5168BS  | QFN2.5×2.5-16       | 2                 | 4~23                | 8                    | 3.35V               | 40                  | 600                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5188DU  | QFN2.5×2.5-16       | 1                 | 4~23                | 8                    | 0.6                 | 45                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5188CU  | QFN2.5×2.5-16       | 2                 | 5.5~23              | 8                    | 5.1                 | 36                  | 600                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5138A   | UQFN3×3-23          | 1                 | 4.5~23              | 8                    | 0.6                 | 80                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5138D   | UQFN3×3-23          | 1                 | 4.5~23              | 8                    | 0.6                 | 80                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5138B   | UQFN3×3-23          | 2                 | 4.5~23              | 8                    | 3.35                | 80                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5138C   | UQFN3×3-23          | 2                 | 5.5~23              | 8                    | 5.1                 | 80                  | 500                   | Internal   | Y          | PFM/USM    | Y    | COT            |
| ITG5068A   | QFN3×3-20           | 1                 | 4~23                | 8                    | 0.6                 | 45                  | 500                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5068C   | QFN3×3-20           | 2                 | 5.5~23              | 8                    | 5.1                 | 36                  | 600                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5079A   | QFN3×3-20           | 1                 | 4~23                | 10                   | 0.6                 | 45                  | 500                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5079C   | QFN3×3-20           | 2                 | 5.5~23              | 10                   | 5.1                 | 36                  | 600                   | Internal   | Y          | PFM        | Y    | COT            |
| ITG5110    | SOT23-6 / DFN2×3-8  | 1                 | 4.5~46              | 0.2                  | 0.8                 | 26                  | -                     | Internal   | Y          | PFM        | Y    | HYS            |

## Step-down Converter VIN Max &gt;10V

| P/N         | Package            | Regulated Outputs | V <sub>IN</sub> (V) | I <sub>OUT</sub> (A) | V <sub>FB</sub> (V) | I <sub>Q</sub> (uA) | F <sub>SW</sub> (kHz) | Soft Start | Power Good | Light Load | Sync | Control Method |
|-------------|--------------------|-------------------|---------------------|----------------------|---------------------|---------------------|-----------------------|------------|------------|------------|------|----------------|
| ITG5018     | SOT23-6            | 1                 | 4.7~40              | 0.6                  | 0.8                 | 40                  | 2000                  | Internal   | N          | PFM        | Y    | PCM            |
| ITG5018B    | SOT23-6            | 1                 | 4.7~40              | 0.6                  | 0.8                 | 40                  | 800                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5026     | SOT23-6            | 1                 | 4.7~40              | 1                    | 0.8                 | 40                  | 1100                  | Internal   | N          | FCCM       | Y    | PCM            |
| ITG5015A    | ESOP8              | 1                 | 3.6~40              | 2                    | 0.8                 | 65                  | 440                   | Internal   | N          | PFM        | Y    | PCM            |
| ITG5116F    | ESOP8/ SOP8        | 1                 | 4.7~40              | 3                    | 0.8                 | 65                  | 100~700               | Internal   | N          | PFM        | N    | PCM            |
| ITGH5102A   | QFN3×2-12          | 1                 | 4~36                | 2                    | 0.8                 | 45                  | 410                   | Internal   | Y          | PFM        | Y    | PCM            |
| ITGH5102B   | QFN3×2-12          | 1                 | 4~36                | 2                    | 0.8                 | 45                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGH5102C   | QFN3×2-12          | 1                 | 4~36                | 2                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGH5102CSF | QFN3×2-12          | 1                 | 4~36                | 2                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | FCCM       | Y    | PCM            |
| ITGH5103AS  | QFN3×2-12          | 1                 | 4~36                | 3                    | 0.8                 | 45                  | 410                   | Internal   | Y          | PFM        | Y    | PCM            |
| ITGH5103BS  | QFN3×2-12          | 1                 | 4~36                | 3                    | 0.8                 | 45                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGH5103CS  | QFN3×2-12          | 1                 | 4~36                | 3                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGH5103CSF | QFN3×2-12          | 1                 | 4~36                | 3                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | FCCM       | Y    | PCM            |
| ITG5117S    | ESOP8              | 1                 | 4.5~45              | 5                    | 0.75                | 180                 | 100~2000              | Adjustable | N          | PFM        | N    | PCM            |
| ITG5117     | DFN4×4-10          | 1                 | 4.5~45              | 5                    | 0.8                 | 180                 | 100~2000              | Adjustable | Y          | PFM        | N    | PCM            |
| ITG5117C    | ESOP8              | 1                 | 4.5~45              | 5                    | 0.8                 | 180                 | 100~2000              | Internal   | N          | PFM        | N    | PCM            |
| ITG5126     | SOT23-6 / DFN2×3-8 | 1                 | 4.5~65              | 0.2                  | 0.8                 | 26                  | -                     | Internal   | Y          | PFM        | Y    | HYS            |
| ITG9520     | ESOP8              | 1                 | 4.5~65              | 1                    | 0.8                 | 130                 | 100~2000              | Internal   | Y          | PFM        | N    | PCM            |
| ITG5121     | ESOP8              | 1                 | 4.5~65              | 2                    | 0.8                 | 130                 | 100~2000              | Internal   | Y          | PFM        | N    | PCM            |
| ITGH5123    | DFN4×4-10          | 1                 | 4.5~65              | 3.5                  | 0.8                 | 180                 | 100~2000              | Adjustable | Y          | PFM        | N    | PCM            |
| ITGH5123S   | ESOP8              | 1                 | 4.5~65              | 3.5                  | 0.75                | 180                 | 100~2000              | Adjustable | N          | PFM        | N    | PCM            |
| ITGH5123P   | ESOP8              | 1                 | 4.5~65              | 3.5                  | 0.75                | 180                 | 100~2000              | Internal   | Y          | PFM        | N    | PCM            |
| ITGH5125    | DFN4×4-10          | 1                 | 4.8~65              | 5                    | 0.8                 | 180                 | 100~2000              | Adjustable | Y          | PFM        | N    | PCM            |
| ITGH5125S   | ESOP8              | 1                 | 4.5~65              | 5                    | 0.75                | 180                 | 100~2000              | Adjustable | N          | PFM        | Y    | PCM            |
| ITGH5125C   | ESOP8              | 1                 | 4.5~65              | 5                    | 0.8                 | 180                 | 100~2000              | Internal   | N          | PFM        | N    | PCM            |
| ITGH5140    | DFN4×4-8 / ESOP8   | 1                 | 6~100               | 0.6                  | 1.225               | 100                 | 100~1000              | Internal   | N          | PFM        | Y    | COT            |
| ITGH5140F   | DFN4×4-8 / ESOP8   | 1                 | 6~100               | 0.6                  | 1.225               | 100                 | 100~1000              | Internal   | N          | FCCM       | Y    | COT            |
| ITGH5141    | DFN4×4-8 / ESOP8   | 1                 | 6~100               | 1                    | 1.225               | 100                 | 100~1000              | Internal   | N          | PFM        | Y    | COT            |
| ITGH5141F   | DFN4×4-8 / ESOP8   | 1                 | 6~100               | 1                    | 1.225               | 100                 | 100~1000              | Internal   | N          | FCCM       | Y    | COT            |
| ITG5142     | ESOP8              | 1                 | 6~100               | 1.5/2.5              | 1.225               | 20                  | 300                   | Internal   | N          | PFM        | N    | COT            |
| ITG5142P    | ESOP8              | 1                 | 6~100               | 1.5/2.5              | 1.225               | 20                  | 100~600               | Internal   | Y          | PFM        | N    | COT            |
| ITG5143     | ESOP8              | 1                 | 6~100               | 1.5/3.5              | 1.225               | 20                  | 300                   | Internal   | N          | PFM        | N    | COT            |
| ITG5143P    | ESOP8              | 1                 | 6~100               | 1.5/3.5              | 1.225               | 20                  | 100~600               | Internal   | Y          | PFM        | N    | COT            |

## Step-up Converter

| P/N       | Package                | Regulated Outputs | V <sub>IN</sub> (V) | I <sub>OUT</sub> (A) | V <sub>SUB</sub> (V) | Max. Switch Current (A) | I <sub>Q</sub> (uA) | V <sub>FB</sub> (V) | F <sub>SW</sub> (kHz) | Type                                      |
|-----------|------------------------|-------------------|---------------------|----------------------|----------------------|-------------------------|---------------------|---------------------|-----------------------|---|
| ITG5522   | SOT563                 | 1                 | 0.7~5.5             | 2.2~5.5              | -                    | 3.6                     | 30                  | 0.6                 | 1000                  | Sync. Converter                           |
| ITG5702   | WCSP, DFN2×2-6, SOT563 | 1                 | 0.9~5.5             | 2.5~5.5              | -                    | 1                       | 0.7                 | 1                   | no fixed              | Sync. Converter                           |
| ITG5702B  | WCSP, DFN2×2-6, SOT563 | 1                 | 0.9~5.5             | 2.5~5.5              | -                    | 0.8                     | 0.7                 | 1                   | no fixed              | Sync. Converter, Quick Transient Response |
| ITG5520S  | QFN2×2-14              | 1                 | 1.2~5               | 2.5~5.5              | -                    | 9                       | 30                  | 1.2                 | 600                   | Sync. Converter                           |
| ITG5701A  | DFN1.5×1.5-6           | 2                 | 1.2~5.5             | 3.3                  | 3 (LDO)              | 0.5                     | 0.7                 | -                   | no fixed              | Sync. Converter+LDO                       |
| ITG5701B  | DFN1.5×1.5-6           | 2                 | 1.2~5.5             | 3.3                  | 2.8 (LDO)            | 0.5                     | 0.7                 | -                   | no fixed              | Sync. Converter+LDO                       |
| ITG5701E  | DFN1.5×1.5-6           | 2                 | 1.2~5.5             | 3                    | ON (Load Switch)     | 0.5                     | 0.7                 | -                   | no fixed              | Sync. Converter+Load Switch               |
| ITG5701F  | DFN1.5×1.5-6           | 2                 | 1.2~5.5             | 3.3                  | ON (Load Switch)     | 0.5                     | 0.7                 | -                   | no fixed              | Sync. Converter+Load Switch               |
| ITG5701G  | DFN1.5×1.5-6           | 2                 | 1.2~5.5             | 5                    | ON (Load Switch)     | 0.5                     | 0.7                 | -                   | no fixed              | Sync. Converter+Load Switch               |
| ITG5520SA | QFN2×2-14              | 1                 | 1.2~5.5             | 2.5~5.5              | -                    | 9                       | 30                  | 1.2                 | 600                   | Sync. Converter                           |
| ITG5523   | VQFN2×2-7              | 1                 | 1.2~5.5             | 2.5~5.5              | -                    | 9                       | 30                  | 1.2                 | 600                   | Sync. Converter, Load Disconnect, SCP     |
| ITG5530   | SOT23-6                | 1                 | 1.8~5.5             | 2.5~5.5              | -                    | 2                       | 100                 | 0.8                 | no fixed              | Sync. Converter, Load Disconnect, SCP     |
| ITG5513   | QFN3×3-20              | 1                 | 2.6~20              | up to 20             | -                    | 15                      | 70                  | 1                   | 300~2000              | Sync. Converter                           |
| ITGH5513  | QFN3×3-20              | 1                 | 2.8~20              | up to 20             | -                    | 15                      | 80                  | 1                   | 400~2000              | Sync. Converter                           |
| ITG5510   | QFN3×4-15              | 1                 | 3~20                | 4~20                 | -                    | 10                      | 65                  | 0.9                 | 400                   | Sync. Converter                           |



## Buck-Boost

| P/N     | Package   | V <sub>IN</sub> (V) | V <sub>out</sub> (V) | I <sub>Q</sub> (μA) | F <sub>SW</sub> (kHz) | V <sub>FB</sub> (V) | Current Limit (A) | Interface | Integrated FET |
|---------|-----------|---------------------|----------------------|---------------------|-----------------------|---------------------|-------------------|-----------|----------------|
| ITG3651 | QFN3×4-15 | 3~21                | 0.9~20               | 50                  | 450                   | 0.9                 | 7                 | No        | Yes            |
| ITG3702 | QFN4×4-32 | 3~24                | 2.4~24               | 30                  | 300~500               | 1.2                 | 13                | I2C       | No             |

## Controller

| P/N       | Package       | Topology | V <sub>IN</sub> (V) | V <sub>out</sub> (V) | I <sub>Q</sub> (μA) | F <sub>SW</sub> (kHz) | V <sub>FB</sub> (V) | Features  |
|-----------|---------------|----------|---------------------|----------------------|---------------------|-----------------------|---------------------|---|
| ITGH6344A | QFN3.5×4.5-20 | Buck     | 6~65                | 0.8~Dmax·VIN         | 600                 | 100~740               | 0.8                 | Light Load Selectable(PFM/FCC)  |
| ITGH6346A | QFN3.5×4.5-20 | Buck     | 6~100               | 0.8~Dmax·VIN         | 600                 | 100~740               | 0.8                 | Light Load Selectable(PFM/FCC)<br>MOSFET Gate Driver Voltage Selectable(7.5V/10V) |

## Isolated DCDC

| P/N      | Package                 | Topology             | V <sub>IN</sub> (V) | Max Power (W) | R <sub>DS(ON)</sub> (Ω) | F <sub>MAX</sub> (kHz) | Soft Start   | Features  |
|----------|-------------------------|----------------------|---------------------|---------------|-------------------------|------------------------|--------------|---|
| ITG3510  | SOT23-5                 | Flyback              | 3~42                | 6             | 0.5                     | 430                    | Internal     | Opto-Free, EN control   |
| ITGH3515 | QFN4×4-8 / SOP8 / MSOP8 | Flyback              | 17~75               | 6             | 2.1                     | 1MHz                   | Internal     | Internal Error Amplifier, Integrated 200V Power Switch Circuit, Startup Circuit |
| ITGH3516 | DFN5×6-8                | Flyback              | 17~75               | 20            | 0.7                     | 1.5MHz                 | Internal     | Internal Error Amplifier, Integrated 200V Power Switch Circuit, Startup Circuit |
| ITGH3530 | QFN4×4-24               | Active Clamp Forward | 18~75               | 300           | External                | External Setting       | Programmable | Support Voltage Mode, Current Mode  |
| ITGH5581 | SOIC8                   | Boost, Flyback       | 9~30                | External      | External                | 500                    | Programmable | Current mode PWM controller   |

## Power Module

| P/N       | Package        | V <sub>IN</sub> (V) | I <sub>out</sub> (A) | I <sub>Q</sub> (μA) | F <sub>SW</sub> (kHz) | V <sub>FB</sub> (V) | Function  | Soft Start | Power Good | Light Load | Isolated |
|-----------|----------------|---------------------|----------------------|---------------------|-----------------------|---------------------|-----------|------------|------------|------------|----------|
| ITGM9102  | QFN2.5×3.5x1.6 | 2.9~6               | 2                    | 850                 | 2000                  | 0.6                 | Step-down | Internal   | Y          | FCCM       | N        |
| ITGM9103A | QFN2.5×3.5x1.6 | 2.9~6               | 3                    | 850                 | 2000                  | 0.6                 | Step-down | Internal   | Y          | FCCM       | N        |

## LNB Power Supply

| P/N      | Package           | Protocal   | V <sub>IN</sub> (V) | I <sub>OUT</sub> (A) | V <sub>OUT</sub> (V)             | 22kHz Tone Signal | Programmable Current Limit | Cable Compensation |
|----------|-------------------|------------|---------------------|----------------------|----------------------------------|-------------------|----------------------------|--------------------|
| ITG4002  | ESOP8             | DiSEqC 1.x | 8~14                | 0.55                 | 14.2/19.3                        | External          | -                          | Y                  |
| ITG4005  | ESOP8<br>TSOT23-6 | DiSEqC 1.x | 4.5~14              | 1                    | 13.5/18.5/14.5/19.5<br>13.5/18.5 | External          | Y<br>-                     | Y<br>N             |
| ITG4005H | TSOT23-6          | DiSEqC 1.x | 4.5~14              | 0.6                  | 14.1/19.2                        | External          | -                          | Y                  |

## DC Input Lighting Product

| P/N      | Package         | Topology                  | V <sub>IN</sub> (V) | Switch Current Limit | Frequency         | Dimming      | Sync |
|----------|-----------------|---------------------------|---------------------|----------------------|-------------------|--------------|------|
| ITG1120  | TSOT23-6        | Buck                      | 4.5~20              | 1.7A (Max Duty)      | 1MHz              | PWM / Analog | Y    |
| ITG1123  | SOT23-6         | Buck                      | 4.5~28              | 2A                   | 600KHz            | PWM          | Y    |
| ITG1125  | SOT23-6         | Buck                      | 4.5~28              | 2A                   | 1MHz              | PWM          | Y    |
| ITG1130H | ESOP8 / SOT23-6 | Buck / Boost / Buck-Boost | 4.5~40              | 2A peak              | Constant 2us toff | PWM / Analog | N    |
| ITG11A0  | ESOP8           | Buck                      | 15~100              | /                    | 300KHz            | N            | N    |

# Vcore Power

## Multi-phase Controller

| P/N      | Package   | Rail Number | Phase Number | Min Input Voltage(V) | Max Input Voltage(V) | Min Fsw (kHz) | Max Fsw (kHz) | Interface     |
|----------|-----------|-------------|--------------|----------------------|----------------------|---------------|---------------|---------------|
| ITGH6374 | QFN5×5-40 | 2           | 8            | 3.15                 | 3.6                  | 10            | 1000          | PMBus/I2C     |
| ITGH6375 | QFN5×5-40 | 2           | 8            | 3.15                 | 3.6                  | 10            | 1000          | VR14/13.HC/13 |
| ITGH6396 | QFN6×6-48 | 2           | 6            | 3.15                 | 3.6                  | 10            | 1000          | IMVP9.1/9     |

## DrMOS

| P/N      | Package    | Min Input Voltage(V) | Max Input Voltage(V) | Min Fsw (kHz) | Max Fsw (kHz) | Typical Current Limit(A) | PWM Logic Voltage(V) |
|----------|------------|----------------------|----------------------|---------------|---------------|--------------------------|----------------------|
| ITGH7060 | LGA5×6-41  | 3                    | 16                   | 100           | 1000          | 75                       | 3.3                  |
| ITGH7067 | TLGA5×6-41 | 3                    | 16                   | 100           | 1500          | 75                       | 3.3                  |
| ITGH7030 | QFN3×5-21  | 4.5                  | 22                   | 100           | 1500          | 60                       | 3.3                  |

# ACDC Power Supply

## ACDC Synchronous Rectifier

| P/N       | Package | Breakdown Voltage (V) | R <sub>ds(on)</sub> (mΩ) | V <sub>OUT</sub> (V) | Output Current (A) | Supported Operation Mode                  |
|-----------|---------|-----------------------|--------------------------|----------------------|--------------------|---|
| ITG7700A  | SOP8    | 40                    | 15                       | 5                    | 2.4                | DCM, QR                                   |
| ITG7700EC | SOP8    | 40                    | 20                       | 5                    | 2                  | DCM, QR                                   |
| ITG7703D  | SOP8    | 45                    | 10                       | 5                    | 3                  | DCM, QR                                   |
| ITG7707F  | SOP8    | 50                    | 7                        | 5                    | 3.4                | DCM, QR                                   |
| ITG7707D  | SOP8    | 60                    | 10                       | 5~12                 | 3                  | DCM, QR                                   |
| ITG77216  | SOP8    | 60                    | 10                       | 3~12                 | 3                  | CCM, CrCM, DCM, QR                        |
| ITG77186B | SOP8    | 60                    | 13                       | 3~12                 | 3                  | CCM, CrCM, DCM, QR                        |
| ITG77198B | SOP8    | 80                    | 15                       | 5~15                 | 2.4                | CCM, CrCM, DCM, QR                        |
| ITG77218  | SOP8    | 80                    | 10                       | 3~15                 | 3                  | CCM, CrCM, DCM, QR                        |
| ITG77218B | SOP8    | 85                    | 20                       | 3~15                 | 2                  | CCM, CrCM, DCM, QR                        |
| ITG77218C | SOP8    | 85                    | 15                       | 3~15                 | 2.4                | CCM, CrCM, DCM, QR                        |
| ITG7719A  | SOP8    | 100                   | 10                       | 5~20                 | 3                  | CCM, CrCM, DCM, QR                        |
| ITG7721AH | SOP8    | 100                   | 10                       | 3~20                 | 3                  | CCM, CrCM, DCM, QR                        |
| ITG7726B  | SOT23-6 | 140                   | External                 | 3~20                 | -                  | High Frequency;<br>CCM, CrCM, DCM, QR,ACF |
| ITG7726BL | SOT23-6 | 150                   | External                 | 3~20                 | -                  | CCM, CrCM, DCM, QR,ACF                    |
| ITG7726BH | SOT23-6 | 150                   | External                 | 3~20                 | -                  | High Frequency;<br>CCM, CrCM, DCM, QR,ACF |
| ITG7726H  | SOT23-6 | 150                   | External                 | 3~20                 | -                  | CCM, CrCM, DCM, QR,ACF,AHB                |

## ACDC Flyback PWM IC

| P/N        | Package   | Max Power (W) | PSR/SSR | Type            | MOSFET Rating (V) | R <sub>ds(on)</sub> (Ω) | F <sub>MAX</sub> (kHz) | Features                     | Standby Power (mW) |
|------------|-----------|---------------|---------|-----------------|-------------------|-------------------------|------------------------|------------------------------|--------------------|
| ITG1520AH  | SOP8      | 12            | PSR     | QR              | 650               | 4.8                     | 85                     | CC/CV:±5%                    | <75                |
| ITG1510PA  | DIP7      | 18            | SSR     | Fixed Frequency | 1200, Si          | 6(typ)                  | 100                    | -                            | <75                |
| ITG1520B   | SOP8      | 18            | PSR     | QR              | 650               | 2.5                     | 85                     | CC/CV:±5%                    | <75                |
| ITG1520D   | SOP8      | 18            | PSR     | QR              | 650               | 2.5                     | 85                     | CC/CV:±5%                    | <75                |
| ITG1513A   | SOP8      | 20            | SSR     | Fixed Frequency | 650, Si           | 1.5(max)                | 70                     | -                            | <75                |
| ITG1518HCD | DIP7      | 20            | SSR     | Fixed Frequency | 800, Si           | 3.95(max)               | 100                    | -                            | <75                |
| ITG1566CD  | DFN5×6-7  | 25            | SSR     | QR              | 650, GaN          | 1.2(max)                | 120                    | -                            | <75                |
| ITG1566B   | DFN5×6-7  | 33            | SSR     | QR              | 650, GaN          | 0.8(max)                | 170                    | -                            | <75                |
| ITG1566A   | DFN5×6-7  | 45            | SSR     | QR              | 650, GaN          | 0.48(max)               | 170                    | -                            | <75                |
| ITG1565    | DFN6×8    | 120           | SSR     | QR              | 650, GaN          | 0.26(max)               | 170                    | -                            | <75                |
| ITG1515HA  | SSOP10    | 150           | SSR     | QR              | External GaN      | External GaN            | 170                    | -                            | <75                |
| ITG1518L   | SOT23-6   | 150           | SSR     | Fixed Frequency | External          | External                | 65                     | -                            | <75                |
| ITG1516    | SSOP10    | 150           | SSR     | QR              | External          | External                | 130                    | -                            | <75                |
| ITG1550    | QFN4×4-20 | 200           | SSR     | ACF             | External          | External                | External Setting       | -                            | <75                |
| ITG1556    | QFN4×4-20 | 300           | SSR     | AHB             | External          | External                | External Setting       | Protection:<br>Auto-recovery | <75                |
| ITG1556B   | QFN4×4-20 | 300           | SSR     | AHB             | External          | External                | External Setting       | Protection:Latch             | <75                |

## ACDC Half Bridge IC

| P/N      | Package | Max Power (W) | Type                        | MOSFET Rating (V) | R <sub>ds(on)</sub> (Ω) | F <sub>MAX</sub> (kHz) | VCC Quiescent Current (mA) | Application  |
|----------|---------|---------------|-----------------------------|-------------------|-------------------------|------------------------|----------------------------|--|
| ITG1568K | DFN6×8  | 180           | Half Bridge Driver with GaN | 650, GaN          | 0.22(typ)               | 2000                   | 0.15                       | AHB,ACF,LLC and other Half/Full Bridge Application |

## PFC Controller

| P/N     | Package | Max Power (W) | F <sub>MAX</sub> (kHz) | External OTP | 2nD OVP | Loop Compensation | Mode |
|---------|---------|---------------|------------------------|--------------|---------|-------------------|------|
| ITG1571 | SOP8    | 300           | 130kHz                 | Yes          | Yes     | Internal          | CRM  |
| ITG1572 | SOP8    | 300           | 130kHz                 | No           | Yes     | External          | CRM  |

## Offline Buck Regulator

| P/N        | Package | MOSFET BV (V) | R <sub>DSon</sub> (Ω) | I <sub>OUT</sub> (mA) | V <sub>OUT</sub> (V) | Frequency (kHz) | Standby Power (mW) |
|------------|---------|---------------|-----------------------|-----------------------|----------------------|-----------------|--------------------|
| ITG1530    | SOT23-3 | 700           | 15                    | 200                   | 5                    | 30              | <30                |
| ITG15307   | SOP8    | 700           | 15                    | 200                   | 5                    | 30              | <30                |
| ITG1532N5  | SOP8    | 650           | 30                    | 150                   | 5                    | 40              | <30                |
| ITG1532M5  | SOP8    | 650           | 25                    | 300                   | 5                    | 40              | <30                |
| ITG1531O   | SOP8    | External      | External              | 2000                  | 3~150                | -               | <150               |
| ITG1531B   | SOP7    | 500           | 5                     | 600                   | 3~150                | -               | <75                |
| ITG1531M   | SOP7    | 500           | 15                    | 250                   | 3~150                | -               | <50                |
| ITGB1536NC | ASOP7   | 500           | 20                    | 200                   | 3.3                  | 30              | <30                |
| ITGB1536AC | ASOP7   | 500           | 17                    | 300(450mA pulse)      | 3.3                  | 30              | <30                |
| ITG1536NC  | SOP7    | 500           | 20                    | 200                   | 3.3                  | 30              | <30                |
| ITG1536AC  | SOP7    | 500           | 14                    | 450                   | 3.3                  | 30              | <30                |
| ITG1532A   | SOP8    | 650           | 13                    | 300                   | 12/18                | 65              | <30                |
| ITG1532B   | SOP8    | 650           | 5                     | 450                   | 12/18                | 65              | <30                |
| ITG15328A  | DIP7    | 650           | 13                    | 400                   | 12                   | 65              | <30                |
| ITG15328B  | DIP7    | 650           | 5                     | 550                   | 12                   | 65              | <30                |
| ITG15329A  | DIP7    | 650           | 13                    | 350                   | 18                   | 65              | <30                |
| ITG15329B  | DIP7    | 650           | 5                     | 500                   | 18                   | 65              | <30                |

## ACDC Special IC

| P/N     | Package | Device | Breakdown Voltage (V) | Source Current @V <sub>CC</sub> =10V | Function                 | V <sub>CC</sub> Voltage (V) |
|---------|---------|--------|-----------------------|--------------------------------------|--------------------------|-----------------------------|
| ITG7921 | SOT23-3 | N-JFET | 600                   | 4mA                                  | 0.55 Shut-down           | 27                          |
| ITG7920 | SOT23-3 | N-JFET | 600                   | 4mA                                  | High Efficiency Charging | 14.5                        |

# Battery Management System

## Battery Protection

| P/N          | Package          | Protection Level | Cell Number | Operation Voltage | Support Balance | Support Cascade | Battery Type           | Applications  |
|--------------|------------------|------------------|-------------|-------------------|-----------------|-----------------|------------------------|---|
| ITG3362-XXX  | X2DFN1.2×1.2-6   | 1                | 1           | 1.5V~6V           | N               | N               | Li-ion/Polymer Battery | Wearable Devices; Li-ion/Polymer Rechargeable Battery Pack  |
| ITG3360-XXX  | X2DFN1.57×1.9-6L | 1                | 1           | 1.5V~6V           | N               | N               | Li-ion/Polymer Battery | Mobile Phone; Li-ion/Polymer Rechargeable Battery Pack  |
| ITG3320-XX   | SOT23-6          | 1                | 2           | 4V~20V            | Y               | N               | Li-ion/Polymer Battery | Li-ion/Polymer Rechargeable Battery Pack  |
| ITG3412-XXX  | UDFN1.97×2.46-8  | 2                | 2~4         | 3.5V~28V          | N               | N               | Lithium-ion Battery    | Notebook; Rechargeable Lithium-ion Battery Pack   |
| ITG3410-XXX  | MSOP8            | 2                | 2~5         | 3V~25V            | N               | N               | Lithium-ion Battery    | Power tool; Notebook; Rechargeable Lithium-ion Battery Pack   |
| ITG3313-XXX  | MSOP10           | 1                | 3           | 3V~25V            | N               | N               | Lithium-ion Battery    | Rechargeable Lithium-ion Battery Pack; Power Tools; Garden Tools  |
| ITG3313S-XXX | SOP8             | 1                | 3           | 3V~25V            | N               | N               | Lithium-ion Battery    | Rechargeable Lithium-ion Battery Pack; Power Tools; Garden Tools  |
| ITG3312-XXX  | TSSOP-20         | 1                | 3~5         | 5V~35V            | Y               | N               | Lithium-ion Battery    | Rechargeable Lithium-ion Battery Pack; Power Tools; UPS Backup Battery  |
| ITG3318-XXX  | TSSOP-20         | 1                | 3~5         | 5V~35V            | Y               | Y               | Lithium-ion Battery    | Rechargeable Lithium-ion Battery Pack; Power Tools; UPS Backup Battery  |
| ITG3317-XXX  | TSSOP-24         | 1                | 5~7         | 6V~60V            | N               | Y               | Lithium-ion Battery    | Rechargeable Lithium-ion Battery Pack; Electric Bicycles; Motorcycles; Backup Battery Systems; Hybrid Electric Vehicles |
| ITG3319-XXX  | TSSOP-24         | 1                | 6~7         | 6V~40V            | Y               | N               | Lithium-ion Battery    | Rechargeable Lithium-ion Battery Pack; Electric Scooters; Fascia Massagers; Electric Tools; Vacuum Cleaner              |
| ITG3311-XXX  | TSSOP-24         | 1                | 8~10        | 6V~60V            | N               | Y               | Lithium-ion Battery    | Rechargeable Lithium-ion Battery Pack; Electric Bicycle; Motorcycles; Backup Battery Systems; Hybrid Electric Vehicles  |

## Analog Front-End

| P/N     | Package | Min Cells | Max Cells | Operation Voltage | Operating Temperature Range | Communication Interface | Support Cascade |
|---------|---------|-----------|-----------|-------------------|-----------------------------|-------------------------|-----------------|
| ITG3370 | TSSOP38 | 4         | 10        | 8-60              | -40 to 85                   | SPI                     | Y               |
| ITG3371 | TSSOP38 | 4         | 10        | 8-60              | -40 to 85                   | SPI                     | Y               |
| ITG3376 | TSSOP48 | 8         | 16        | 16-120            | -40 to 85                   | SPI                     | N               |
| ITG3323 | TSSOP30 | 13        | 13        | 6~65              | -40 to 85                   | I2C                     | N               |

## Charger

| P/N      | Package             | Battery Cells | Control Topology | Charge Current (A)              | Max Operation $V_{IN}$ (V) | Absolute $V_{IN}$ (V) | Battery Voltage (V) | OTG Function | Battery Type                 | Control Interface |
|----------|---------------------|---------------|------------------|---------------------------------|----------------------------|-----------------------|---------------------|--------------|------------------------------|-------------------|
| ITG3663  | WLCSP-9 (1.75x1.75) | 1             | Linear           | 0.456                           | 5.5                        | 21                    | 4.2                 | N            | Li-Ion, Li-Polymer           | I2C               |
| ITG4054  | SOT23-5             | 1             | Linear           | 0.5                             | 7.5                        | 18                    | 4.2                 | N            | Li-Ion, Li-Polymer           | Stand-alone       |
| ITG4054A | SOT23-5             | 1             | Linear           | 0.5                             | 7.5                        | 18                    | 4.35                | N            | Li-Ion, Li-Polymer           | Stand-alone       |
| ITG3665  | DFN2x2-8            | 1             | Linear           | 1                               | 7.5                        | 18                    | 4.2                 | N            | Li-Ion, Li-Polymer           | Stand-alone       |
| ITG3665A | DFN2x2-8            | 1             | Linear           | 1                               | 7.5                        | 18                    | 4.35                | N            | Li-Ion, Li-Polymer           | Stand-alone       |
| ITG3665B | DFN2x2-8            | 1             | Linear           | 1                               | 7.5                        | 18                    | 4.33                | N            | Li-Ion, Li-Polymer           | Stand-alone       |
| ITG4056  | ESOP-8              | 1             | Linear           | 1                               | 7.5                        | 18                    | 4.2                 | N            | Li-Ion, Li-Polymer           | Stand-alone       |
| ITG4056A | ESOP-8              | 1             | Linear           | 1                               | 7.5                        | 18                    | 4.35                | N            | Li-Ion, Li-Polymer           | Stand-alone       |
| ITG3655E | QFN3x4-15           | 1~4           | Buck-boost       | 3                               | 21                         | 24                    | 3~21                | N            | Li-Ion, Li-Polymer, Li-FePO4 | Stand-alone       |
| ITG3702  | QFN4x4-32           | 2~4           | Buck-boost       | 12.75<br>( $R_{CS}=10m\Omega$ ) | 24                         | 28                    | 2.4~24              | Y            | Li-ion, Li-polymer, Li-FePO4 | I2C               |
| ITG3902  | QFN4x4-24           | 2~3           | Boost            | 2.5                             | 5.5                        | 20                    | 8.15~13.05          | N            | Li-Ion, Li-Polymer           | I2C               |
| ITG3903  | QFN4x4-24           | 2~3           | Boost            | 2.5                             | 5.5                        | 20                    | 8.4~13.05           | N            | Li-Ion, Li-Polymer           | Stand-alone       |

## BMS Special IC

| P/N     | Package      | Function Description  | Channel | Operation Voltage | High-side/Low-side | $I_Q$  |
|---------|--------------|-----------------------|---------|-------------------|--------------------|--------|
| ITG3330 | TSSOP16/SOP8 | High-side NMOS driver | 4/2     | 6~90V             | High-side          | 12.5uA |
| ITG3332 | SOP8         | Ideal diode for BMS   | 1       | 10~150V           | Low-side           | 1.1mA  |

# Linear Power Supply

## Load Switch

| P/N      | Package   | Channel | V <sub>IN</sub> (V) | Max I <sub>OUT</sub> (A) | I <sub>o</sub> (uA) | Enable      | Soft Start | Fault Indicator | Programmable Current Limit | OCP |
|----------|-----------|---------|---------------------|--------------------------|---------------------|-------------|------------|-----------------|----------------------------|-----|
| ITG7106  | DFN2×2-8  | 1       | 0.7~5.5             | 6                        | 60                  | Active High | External   | N               | N                          | N   |
| ITG7107S | DFN3×2-14 | 2       | 0.7~5.5             | 6                        | 80                  | Active High | External   | N               | N                          | N   |
| ITG7109  | DFN3×2-14 | 2       | 0.7~5.5             | 6                        | 80                  | Active High | External   | N               | N                          | N   |
| ITG7113  | SOT23-5   | 1       | 2.7~5.5             | 2                        | 80                  | Active High | Internal   | Y               | N                          | Y   |
| ITG7124  | DFN2×2-10 | 1       | 0.7~5.7             | 5                        | 50                  | Active High | External   | N               | N                          | N   |

## USB Switch

| P/N         | Package            | Channel | V <sub>IN</sub> (V) | Max I <sub>OUT</sub> (A) | I <sub>o</sub> (uA) | Enable      | Soft Start | Fault Indicator | Programmable Current Limit | OCP |
|-------------|--------------------|---------|---------------------|--------------------------|---------------------|-------------|------------|-----------------|----------------------------|-----|
| ITG7115S-1  | SOT23-5            | 1       | 2.7~5.5             | 1                        | 80                  | Active High | Internal   | Y               | N                          | Y   |
| ITG7115S-2  | SOT23-5            | 1       | 2.7~5.5             | 2                        | 80                  | Active High | Internal   | Y               | N                          | Y   |
| ITG7115SA-1 | SOT23-5            | 1       | 2.7~5.5             | 1                        | 80                  | Active Low  | Internal   | Y               | N                          | Y   |
| ITG7115SA-2 | SOT23-5            | 1       | 2.7~5.5             | 2                        | 80                  | Active Low  | Internal   | Y               | N                          | Y   |
| ITG7105B    | TSOT23-5           | 1       | 2.7~5.5             | 3                        | 100                 | Active High | Internal   | N               | Y                          | Y   |
| ITG7111S    | SOT23-6 / DFN2×2-6 | 1       | 2.7~5.5             | 2.2                      | 100                 | Active High | Internal   | Y               | Y                          | Y   |
| ITG7111SA   | SOT23-6 / DFN2×2-6 | 1       | 2.7~5.5             | 2.2                      | 100                 | Active Low  | Internal   | Y               | Y                          | Y   |
| ITGH7103    | SOT23-6 / DFN2×2-6 | 1       | 2.7~5.5             | 1.7                      | 100                 | Active High | Internal   | Y               | Y                          | Y   |

## eFuse, Hotswap, Protection

| P/N      | Package            | Channel | V <sub>IN</sub> (V) | Max I <sub>OUT</sub> (A) | I <sub>o</sub> (mA) | Function       | Soft Start | OCP      | FET      | Programmable Current Limit | OVP |
|----------|--------------------|---------|---------------------|--------------------------|---------------------|----------------|------------|----------|----------|----------------------------|-----|
| ITG7112  | SOT23-6            | 1       | 2.8~16              | 3                        | 0.15                | eFuse          | Internal   | Y        | Internal | Y                          | N   |
| ITG7118  | SOT23-6 / DFN3×2-8 | 1       | 2.8~22              | 2.5                      | 0.1                 | eFuse, OVP     | Internal   | Y        | Internal | N                          | Y   |
| ITGH7160 | LGA5×5-32          | 1       | 4~16                | 50                       | 1.8                 | eFuse          | External   | Y        | Internal | Y                          | Y   |
| ITG7211  | TSSOP16            | 1       | 10~80               | -                        | 1.1                 | Hotswap, ORing | External   | Y        | External | Y                          | Y   |
| ITG7221  | MSOP10             | 1       | 9~80                | -                        | 0.51                | Hotswap        | External   | Y        | External | Y                          | Y   |
| ITG7221L | MSOP10             | 1       | 9~80                | -                        | 0.51                | Hotswap        | External   | Y(latch) | External | Y                          | Y   |
| ITG7222  | MSOP10             | 1       | 2.5~18              | -                        | 1                   | Hotswap        | External   | Y        | External | Y                          | N   |
| ITG7228  | SOP8               | 1       | 9~80                | -                        | 0.53                | Protection     | External   | Y        | External | Y                          | Y   |
| ITG7228P | MSOP10             | 1       | 9~80                | -                        | 0.53                | Protection     | External   | Y        | External | Y                          | Y   |

## ORing and Ideal Diode

| P/N     | Package           | Channel | FET      | High-side / Low-side | V <sub>IN</sub> (V) | I <sub>o</sub> | Features                  |
|---------|-------------------|---------|----------|----------------------|---------------------|----------------|---------------------------|
| ITG7201 | DFN4×3-14 / SOP16 | 2       | External | High-side            | 6~80                | 360uA          | Fault Indicator           |
| ITG7202 | SOP8              | 2       | External | Low-side             | 10~150              | 1.4mA          | ORing                     |
| ITG7203 | SOP8              | 1       | External | Low-side             | 10~150              | 1.1mA          | ORing                     |
| ITG7211 | TSSOP16           | 1       | External | Low-side             | 10~80               | 1.1mA          | ORing+Hotswap             |
| ITG7260 | TSOT23-6          | 1       | External | High-side            | 6~80                | 380uA          | ORing                     |
| ITG7265 | TSOT23-6          | 1       | External | High-side            | 6~60                | 295uA          | Oring, EN Control, Low IQ |





## H-Bridge

| P/N      | Package            | V <sub>IN</sub> (V) | Current Capability (A) | R <sub>DS(ON)</sub> (HS+LS) (mΩ) | Integrated MOS | I <sub>Q</sub> (μA) | Typical Application                       |
|----------|--------------------|---------------------|------------------------|----------------------------------|----------------|---------------------|---|
| ITG7902  | DFN2×2-8 / SOT23-6 | 3~15                | 1                      | 1000                             | Y              | 10                  | Relay Driver, IR-cut Driver, Motor Driver |
| ITG7951C | QFN3×4-15          | 4~20                | 3                      | 40                               | Y              | 37                  | Wireless charger, Full-Bridge Power stage |

## Gate Driver

| P/N       | Package                  | Channel | Configuration        | Max Boot-Voltage (V) | Capacity (SRC/ SNK, A) | Supply Range (V) | Propagation Delay (ns) | Delay Match (ns) |
|-----------|--------------------------|---------|----------------------|----------------------|------------------------|------------------|------------------------|------------------|
| ITGH7911B | SOP8 / DFN4×4-8          | 2       | High-side & low-side | 120                  | 4.0/ 4.0               | 8~15             | 33                     | 2                |
| ITGH7915  | DFN4×4-10/ DFN3×3-9      | 2       | High-side & low-side | 120                  | 4.0/ 4.0               | 8~15             | 42                     | 4                |
| ITGH7917  | SOT23-5/ DFN3×3-6        | 1       | Low-side             | /                    | 4.0/ 4.0               | 4.5~20           | 18                     | /                |
| ITGH7924  | SOP8 / EMSOP8 / DFN3×3-8 | 2       | Low-side             | /                    | 4.5/ 4.5               | 4.5~20           | 13                     | 0.5              |

## Operational Amplifier

| P/N         | Package  | Supply (Max) (V) | Supply (Min) (V) | Rail-to-rail | I <sub>Q</sub> (Typ) (μA) | Input Bias Current (Typ) (pA) | GBW (Typ) (MHz) | Slew Rate (Typ) (V/us) | V <sub>OS@25C</sub> Max (mV) | V <sub>n</sub> at 1 kHz (Typ) (nV/√Hz) | Unit-gain Stable |
|-------------|----------|------------------|------------------|--------------|---------------------------|-------------------------------|-----------------|------------------------|------------------------------|--|------------------|
| ITGS29001TA | SOT23-5  | 5.5              | 1.8              | In, Out      | 60                        | 5                             | 1               | 2.4                    | 1.6                          | 35                                     | Y                |
| ITGS29001TB | SOT23-5  | 5.5              | 1.8              | In, Out      | 60                        | 5                             | 1               | 2.4                    | 1.6                          | 35                                     | Y                |
| ITGS29001CA | SOT353-5 | 5.5              | 1.8              | In, Out      | 60                        | 5                             | 1               | 2.4                    | 1.6                          | 35                                     | Y                |
| ITGS29001CB | SOT353-5 | 5.5              | 1.8              | In, Out      | 60                        | 5                             | 1               | 2.4                    | 1.6                          | 35                                     | Y                |
| ITGS29001   | DFN-5    | 5.5              | 1.8              | In, Out      | 60                        | 5                             | 1               | 2.4                    | 1.6                          | 35                                     | Y                |

## Clock Buffer

| P/N      | Package     | Input Level                                | Input Channel | Output Level | Output Channel | Frequency (MHz) | VDD (V)     | VDDO (V)         | Propagation Delay      | Output Skew |
|----------|-------------|--|---------------|--------------|----------------|-----------------|-------------|------------------|------------------------|-------------|
| ITGH2031 | VQFN5×5-32L | LVPECL/LVDS/HCSL/SSTL/Single-Ended/Crystal | 3             | LVC MOS      | 10             | 0~200           | 3.3/2.5/1.8 | 3.3/2.5/1.8/ 1.5 | 1.9 ns (typ) VDD=3.3 V | 55 ps (max) |

# Automotive Products (ACE-Q100)

## Automotive Buck Converter

| P/N         | Package   | Regulated Outputs | V <sub>IN</sub> (V) | I <sub>OUT</sub> (A) | V <sub>FB</sub> (V) | I <sub>Q</sub> (uA) | F <sub>SW</sub> (kHz) | Soft Start | Power Good | Light Load | Sync | Control Method |
|-------------|-----------|-------------------|---------------------|----------------------|---------------------|---------------------|-----------------------|------------|------------|------------|------|----------------|
| ITGQ5217    | DFN2×2-8  | 1                 | 2.5~5.5             | 2                    | 0.45                | 30                  | 2000                  | Internal   | Y          | PFM        | Y    | COT            |
| ITGQ5273    | QFN3×3-16 | 1                 | 2.95~7              | 3                    | 0.6                 | 210                 | 400~2400              | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGQ5276    | QFN3×3-16 | 1                 | 2.95~7              | 6                    | 0.6                 | 210                 | 400~2400              | Adjustable | Y          | FCCM       | Y    | COT            |
| ITGQ5102A   | QFN3×2-12 | 1                 | 4~36V               | 2                    | 0.8                 | 45                  | 410                   | Internal   | Y          | PFM        | Y    | PCM            |
| ITGQ5102B   | QFN3×2-12 | 1                 | 4~36V               | 2                    | 0.8                 | 45                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGQ5102C   | QFN3×2-12 | 1                 | 4~36V               | 2                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGQ5102CSF | QFN3×2-12 | 1                 | 4~36V               | 2                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | FCCM       | Y    | PCM            |
| ITGQ5103A   | QFN3×2-12 | 1                 | 4~36V               | 3                    | 0.8                 | 45                  | 410                   | Internal   | Y          | PFM        | Y    | PCM            |
| ITGQ5103B   | QFN3×2-12 | 1                 | 4~36V               | 3                    | 0.8                 | 45                  | 1000                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGQ5103C   | QFN3×2-12 | 1                 | 4~36V               | 3                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | PFM        | Y    | PCM            |
| ITGQ5103CSF | QFN3×2-12 | 1                 | 4~36V               | 3                    | 0.8                 | 45                  | 2100                  | Internal   | Y          | FCCM       | Y    | PCM            |
| ITGQ5123    | ESOP8     | 1                 | 4.5~60              | 3.5                  | 0.75                | 180                 | 100~2000              | Internal   | N          | PFM        | N    | PCM            |
| ITGQ5125    | ESOP8     | 1                 | 4.5~60              | 5                    | 0.75                | 180                 | 100~2000              | Internal   | N          | PFM        | N    | PCM            |

## Automotive Buck Controller

| P/N       | Package       | Topology | V <sub>IN</sub> (V) | V <sub>OUT</sub> (V)                  | V <sub>FB</sub> (V) | I <sub>Q</sub> (uA) | F <sub>SW</sub> (kHz) | Features  |
|-----------|---------------|----------|---------------------|---------------------------------------|---------------------|---------------------|-----------------------|---|
| ITGQ6346  | QFN3.5×4.5-20 | Buck     | 6~75                | 0.8~D <sub>max</sub> ·V <sub>IN</sub> | 0.8                 | 600                 | 100~740               | Light Load Selectable(PFM/FCC)<br>MOSFET Gate Driver Voltage Selectable(7.5V/10V) |
| ITGQ6346A | QFN3.5×4.5-20 | Buck     | 6~75                | 0.8~D <sub>max</sub> ·V <sub>IN</sub> | 0.8                 | 600                 | 100~740               | Light Load Selectable(PFM/FCC)<br>MOSFET Gate Driver Voltage Selectable(7.5V/10V) |

## Automotive Load Switch and USB Switch

| P/N      | Package | Channel | V <sub>IN</sub> (V) | Max I <sub>OUT</sub> (A) | I <sub>Q</sub> (uA) | Soft Start | Enable      | Fault Indicator | Programmable Current Limit | OCP |
|----------|---------|---------|---------------------|--------------------------|---------------------|------------|-------------|-----------------|----------------------------|-----|
| ITGQ7101 | SOT23-6 | 1       | 2.7~5.5             | 1.7                      | 100                 | Internal   | Active High | Y               | Y                          | Y   |

## Automotive LDO

| P/N      | Package  | V <sub>IN</sub> (V) | I <sub>OUT</sub> (mA) | I <sub>Q</sub> (uA) | Output Options | Features                               |
|----------|----------|---------------------|-----------------------|---------------------|----------------|--|
| ITGQ7821 | DFN3×3-8 | 2.2~5.5             | 1000                  | 200                 | Adjustable     | Enable, OTP, OCP, Low noise, High PSRR |
| ITGQ7830 | ESOP8    | 2.7~20              | 300                   | 60                  | Adjustable     | Enable, OTP, OCP, Low noise, High PSRR |

## Automotive Gate Driver

| P/N      | Package      | Channel | Configuration | Capacity ( SRC / SNK, A) | Supply Range (V) | Propagation Delay (ns) | Delay Match (ns) |
|----------|--------------|---------|---------------|--------------------------|------------------|------------------------|------------------|
| ITGQ7924 | SOP8 / ESOP8 | 2       | Low-side      | 4.5 / 4.5                | 4.5~20           | 13                     | 0.5              |

## Automotive Boost Converter

| P/N      | Regulated Outputs | V <sub>IN</sub> (V) | V <sub>OUT</sub> (V) | I <sub>Max. Switch Current</sub> (A) | V <sub>FB</sub> (V) | I <sub>Q</sub> (uA) | F <sub>SW</sub> (kHz) | Soft Start | Light Load  | Sync | Control Method |
|----------|-------------------|---------------------|----------------------|--------------------------------------|---------------------|---------------------|-----------------------|------------|-------------|------|----------------|
| ITGQ5513 | 1                 | 2.8~20              | 4~20                 | 15                                   | 1                   | 80                  | 400-2000              | Internal   | PFM/PWM/USM | Y    | COT            |

## Automotive DrMOS

| P/N      | Package   | V <sub>IN</sub> (V) | HS Current Limit (A) | Max F <sub>SW</sub> (kHz) | PWM Logic Voltage (V) | Feature                               |
|----------|-----------|---------------------|----------------------|---------------------------|-----------------------|---------------------------------------|
| ITGQ7065 | LGA5×6-41 | 3~16                | 75                   | 1000                      | 3.3                   | Compatible with mainstream controller |