

SWIFT™ and Step-Down DC/DC Converters



Selector Guide

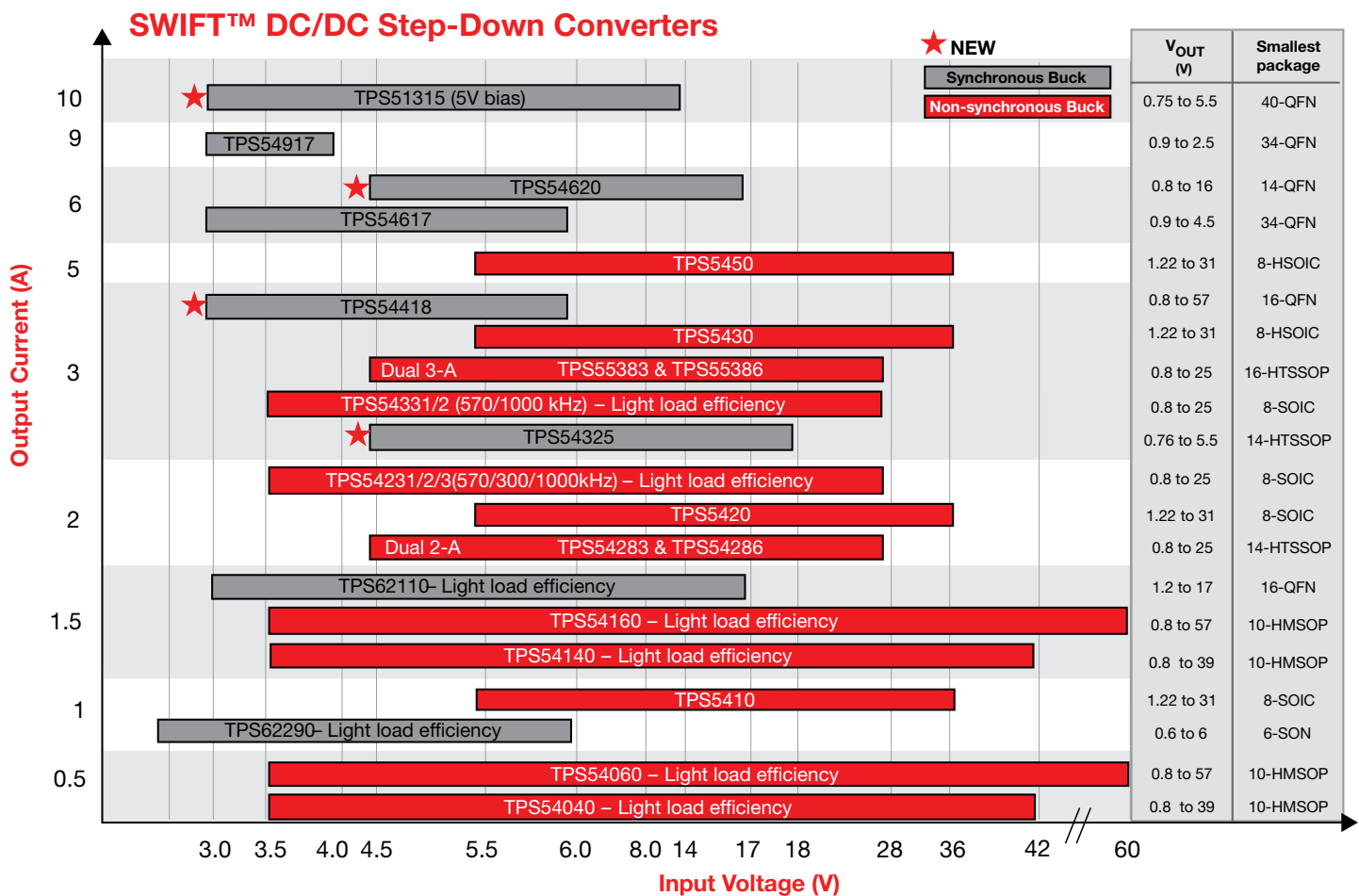
| Device | V _{IN} (V) | V _{OUT} (V) | I _{OUT} (A) | I _q (Typ) (mA) | Switching Frequency | | Package | Features |
|--|---------------------|----------------------|----------------------|---------------------------|---------------------|------------------|------------------------------------|--|
| | | | | | Fixed (kHz) | Adjustable (kHz) | | |
| Wide Input Voltage, Non-Synchronous Buck | | | | | | | | |
| TPS54040 | 3.5 to 42 | 0.8 to 39 | 0.5 | 0.116 | — | 100 to 2500 | 3 x 4.9mm 10-HMSOP PowerPAD™ | PG, EN, SoftStart, UVLO, RT, TRACKIN, CLK, Ext. Comp., Eco-Mode™ |
| TPS54060 | 3.5 to 60 | 0.8 to 57 | 0.5 | 0.116 | — | 100 to 2500 | 3 x 4.9mm 10-HMSOP ¹ | PG, EN, SoftStart, UVLO, RT, TRACKIN, CLK, Ext. Comp., Eco-Mode |
| TPS5410 | 5.5 to 36 | 1.22 to 31 | 1 | 3 | 500 | — | 6 x 4.9mm 8-SOIC | EN, Int. Comp. |
| TPS54140 | 3.5 to 42 | 0.8 to 39 | 1.5 | 0.116 | — | 300 to 2500 | 3 x 4.9mm 10-HMSOP ¹ | PG, EN, SoftStart, UVLO, RT, TRACKIN, CLK, Ext. Comp., Eco-Mode |
| TPS54160 | 3.5 to 60 | 0.8 to 57 | 1.5 | 0.116 | — | 300 to 2500 | 3 x 4.9mm 10-HMSOP ¹ | PG, EN, SoftStart, UVLO, RT, TRACKIN, CLK, Ext. Comp., Eco-Mode |
| TPS5420 | 5.5 to 36 | 1.22 to 31 | 2 | 3 | 500 | — | 6 x 4.9mm 8-SOIC | EN, Int. Comp. |
| TPS5430 | 5.5 to 36 | 1.22 to 31 | 3 | 3 | 500 | — | 6 x 4.9mm 8-SOIC ¹ | EN, Int. Comp. |
| TPS5450 | 5.5 to 36 | 1.22 to 31 | 5 | 3 | 500 | — | 6 x 4.9mm 8-SOIC ¹ | EN, Int. Comp. |
| Mid Input Voltage, Synchronous Buck | | | | | | | | |
| TPS62110 | 3.1 to 17 | 1.2 to 17 | 1.5 | 0.02 | 1000 | — | 4 x 4mm 16-QFN | PG, EN, SYNC, Split Rail, LBI/LBO, Int. Comp., Eco-Mode |
| TPS54325 | 4.5 to 18 | 0.76 to 5.5 | 3 | 0.55 | 380 | 750 | 5 x 6.4mm 14-HTSSOP ¹ | PG, EN, SoftStart, D-CAP2™ |
| TPS54620 | 4.5 to 17 | 0.8 to 16 | 6 | 0.6 | — | 250 to 2000 | 3.5 x 3.5mm 14-QFN | PG, EN, SoftStart, SYNC, UVLO, RT, Ext. Comp., TRACKIN, Split Rail (1.6 to 17 V) |
| TPS51315 | 3 to 14 | .076 to 5.5 | 10 | 0.4 | — | 100 to 1000 | 5 x 7mm 40-QFN | PG, EN, Mode, D-CAP™, Needs 5-V bias |
| Mid Input Voltage, Non-Synchronous Buck | | | | | | | | |
| TPS54231/32/33 | 3.5 to 28 | 0.8 to 25 | 2 | 0.11 | 570/1000/300 | — | 6 x 4.9mm 8-SOIC | EN, SoftStart, UVLO, Ext. Comp., Eco-Mode |
| TPS54331 | 3.5 to 28 | 0.8 to 25 | 3 | 0.11 | 570 | — | 6 x 4.9mm 8-SOIC | EN, SoftStart, UVLO, Ext. Comp., Eco-Mode |
| TPS54332 | 3.5 to 28 | 0.8 to 25 | 3.5 | 0.11 | 1000 | — | 6 x 4.9mm 8-SOIC ¹ | EN, SoftStart, UVLO, Ext. Comp., Eco-Mode |
| Mid Input Voltage, Dual, Non-Synchronous Buck | | | | | | | | |
| TPS54283/86 | 4.5 to 28 | 0.8 to 25 | 2/2 | 1.8 | 300/600 | — | 5 x 6.4mm 14-HTSSOP ¹ | EN1, EN2, ILIM2, SEQ, Int. Comp. |
| TPS55383/86 | 4.5 to 28 | 0.8 to 25 | 3/3 | 1.8 | 300/600 | — | 5 x 6.4mm 16-HTSSOP ¹ | EN1, EN2, ILIM2, SEQ, Ext. Comp. |
| Low Input Voltage, Synchronous Buck | | | | | | | | |
| TPS62290 | 2.3 to 6 | 0.6 to 6 | 1 | 0.015 | — | 2250 | 2 x 2mm 6-SON | EN, Mode, Int. Comp. |
| TPS54317 | 3 to 6 | 0.9 to 3.3 | 3 | 6.2 | 350, 550 | 280 to 1600 | 4 x 5mm 24-QFN | PG, EN, SoftStart, SYNC, RT, Ext. Comp. |
| TPS54418 | 3 to 6 | 0.8 to 57 | 4 | 0.2 | — | 200 to 2000 | 3 x 3mm 16-QFN | PG, EN, SoftStart, UVLO, RT, TRACKIN, SYNC, Ext. Comp. |
| TPS54617 | 3 to 6 | 0.9 to 4.5 | 6 | 11 | 350, 550 | 280 to 1600 | 3.5 x 7mm 34-QFN | PG, EN, SoftStart, RT, Ext. Comp. |
| TPS54917 | 3 to 4 | 0.9 to 2.5 | 9 | 11 | 350, 550 | 280 to 1600 | 3.5 x 7mm 34-QFN | PG, EN, SoftStart, RT, Ext. Comp. |
| TPS54010 | 2.2 to 4 | 0.9 to 2.5 | 14 | 13 | 350, 550 | 280 to 700 | 6.4 x 9.7mm 28-HTSSOP ¹ | PG, EN, SYNC, SoftStart, RT, Split Rail, Ext. Comp. |
| DDR Memory (Active Bus Termination), Synchronous Buck | | | | | | | | |
| TPS54372 | 3 to 6 | 0.2 to 4.5 | 3 | 6.2 | 350 | 280 to 700 | 6.4 x 6.5mm 20-HTSSOP ¹ | PG, EN, RT, REFIN, Ext. Comp. |
| TPS54672 | 3 to 6 | 0.2 to 4.5 | 6 | 11 | 350 | 280 to 700 | 6.4 x 9.7mm 28-HTSSOP ¹ | PG, EN, RT, REFIN, Ext. Comp. |
| TPS54972 | 3 to 4 | 0.2 to 2.5 | 9 | 11 | 350 | 280 to 700 | 6.4 x 6.5mm 20-HTSSOP ¹ | PG, EN, RT, REFIN, Ext. Comp. |

¹ PowerPAD™ package.

New devices are listed in bold red

Glossary

| | | | |
|------------|---|------------|--|
| CLK | Clock pin to synchronize frequency (internal PLL) | PG | Power good pin |
| D-CAP™ | Adaptive on-time for polymer output capacitor | REFIN | External reference input pin for active bus termination |
| D-CAP2™ | Adaptive on-time for ceramic output capacitor | RT | Frequency setting pin |
| Eco-Mode™ | High efficiency at light load | SoftStart | Adjustable slow start |
| EN | Enable pin | Split Rail | Separate power and control voltage inputs |
| Ext. Comp. | Externally compensated | SYNC | Synchronization pin |
| ILIM2 | Current limit adjust pin for output 2 only | TRACKIN | External reference input pin for simultaneous sequencing |
| Int. Comp. | Internally compensated | UVLO | Undervoltage lockout pin |



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