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Product Preview

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The T30LxPSR165 is an ultra−fast linear regulator capable of supplying 300 mA output current from 1.4 V input voltage. The device provides a best−in−class transient response time (1 μs, typ.) suitable for applications with fast sampling rate. The devices features an ultra−low dropout voltage (26 mV at 300 mA) enabling higher efficiency while offering wide output voltage range (1.0 V up to 3.2 V), very low noise and high PSRR for noise sensitive applications. Due to its low quiescent current, the T30LxPSR165 is suitable for battery powered devices such as smartphones and tablets. The device is designed to work with a 1 μF input and 1 μF output ceramic capacitor. It is available in ultra−small 0.35P, 0.64 mm x 0.64 mm Chip Scale Package (CSP).

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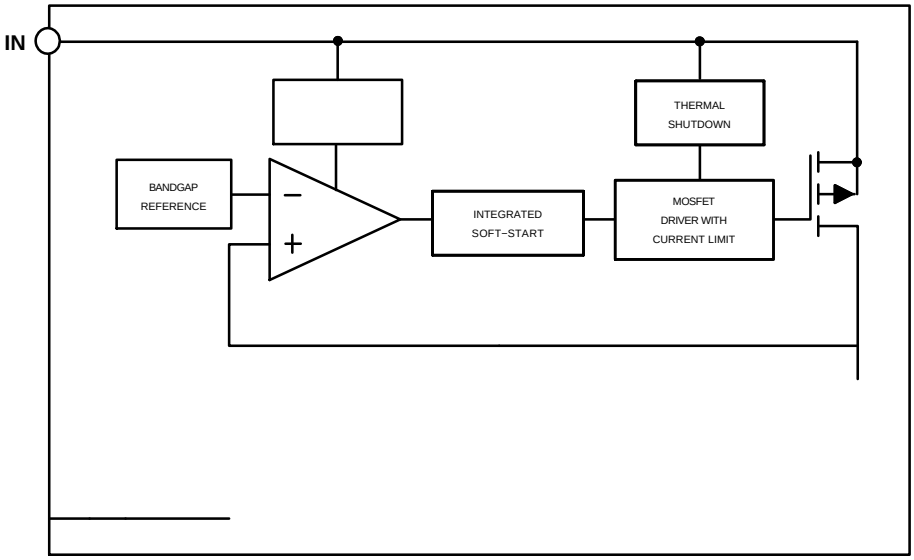

Figure 3. Simplified Schematic Block Diagram

T30LxPSR165CFCT120T2G CHARACTERISTICS

−40°C ≤ T_J ≤ 125°C; V_{IN} = 1.4 V, $V_{OUT(NOM)}$ = 1.2 V, whichever is greater; I_{OUT} = 1 mA; C_{IN} = C_{OUT} = 1 μF eff., unless otherwise noted. V_{EN} = 1 V. Typical values are at T

WLCSP4, 0.64x0.64x0.33
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