

Product Brief

TLS203B0 3.3 & 5V Version

Linear Post Regulator



The TLS203B0 is a micro power, low noise, low dropout voltage regulator. The device is capable of supplying an output current of 300mA with a dropout voltage of 270mV. Designed for use in battery-powered systems, the low quiescent current of 30µA ($I_Q = 0\text{mA}$) makes it an ideal choice.

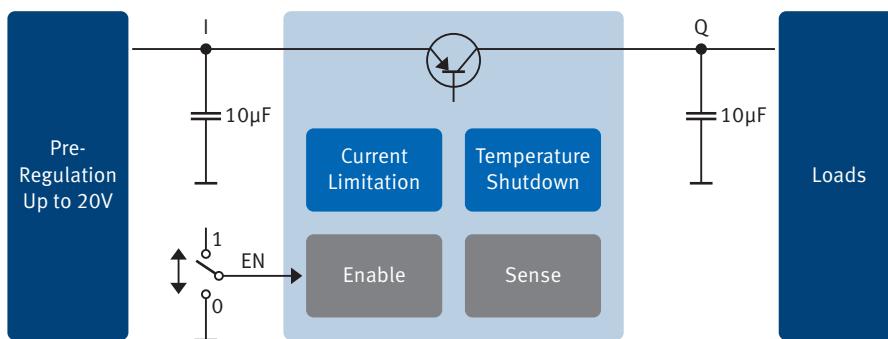
A key feature of the TLS203B0 is its low output noise. By adding an external 10nF bypass capacitor, output noise values down to $30\mu\text{V}_{\text{RMS}}$ can be reached. The TLS203B0 voltage regulator is stable with output capacitors as small as 3.3µF. Small ceramic capacitors can be used without the series resistance required by many other regulators.

Internal protection circuitry includes reverse battery protection, current limiting and reverse current protection. The TLS203B0 comes as fixed output voltages 3.3V, 5.0V as well as adjustable device with a 1.22V reference voltage. It is available in a PG-DSO-8 exposed pad and as well as in a PG-TSON-10 exposed pad package.

Applications

- Infotainment, cluster & camera
- CPU supplies & memory
- Post regulation after DC/DC converter

Application Schematic



Key Features

- Enable
- Output voltage: 3.3V & 5V
- Input current: 300mA
- Low current consumption: 30µA ($I_Q = 0\text{mA}$)
- Drop voltage typ.: 270mV @ 300mA

Key Benefits

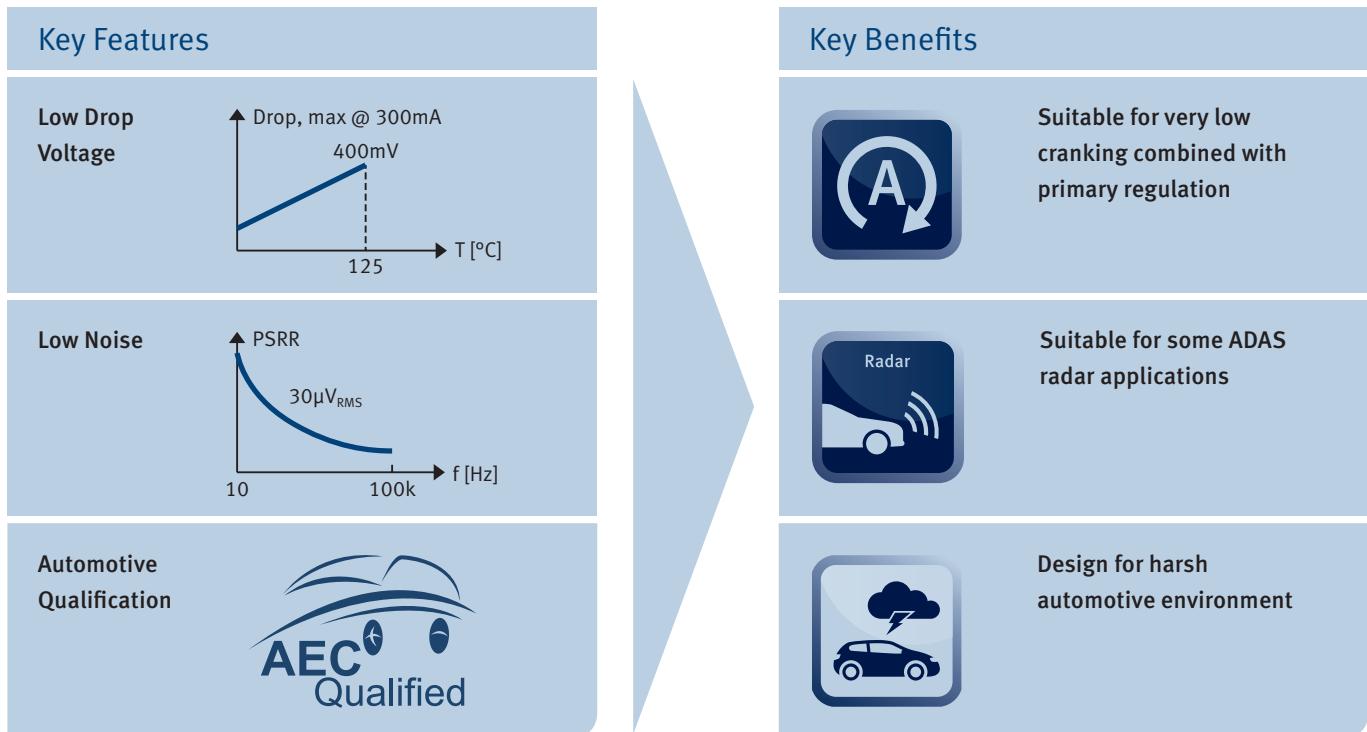
- Cost optimized ceramic output capacitance $\rightarrow 3.3\mu\text{F}$
- Suitable for cranking $\rightarrow 2.3\text{V}$ input
- Power saving with enable feature

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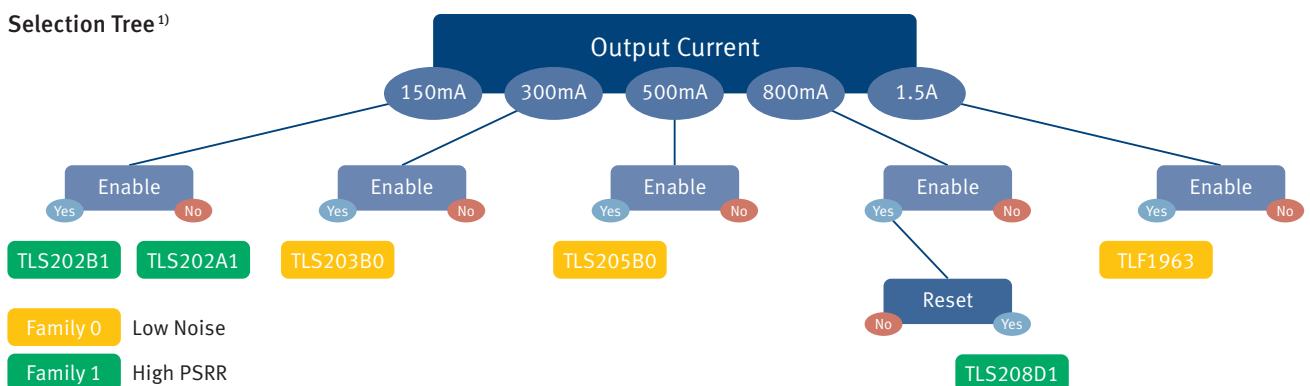
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TLS203B0 3.3 & 5V Overview



Selection Tree¹⁾



1) None contractual product proposal: for more information on product family contact sale relations

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