

Product Brief

TLS208D1

Linear post regulator



The TLS208D1 is a monolithic integrated linear voltage post regulator. The IC regulates an input voltage V_i in the range of $2.7\text{ V} \leq V_i \leq 18\text{ V}$ to an adjustable output voltage of 0.8 V to 5.25 V or to a fixed output voltage 3.3 V with a precision of $\pm 2\%$. The TLS208D1 is especially designed for applications with a permanent connection to preregulators like DC/DC converters. The device is available in the small surface mounted DSO-8 (exposed pad) package or an leadless TSON-10 with the capability for optical inspection. In addition to the enable functionality, the feature set includes a reset with an adjustable reset threshold. The device is designed for the harsh environment of automotive applications. Therefore it is protected against overload, short circuit and overtemperature conditions by the implemented output current limitation and the overtemperature shutdown circuit.

Key features

- > Higher V_{in} ($\leq 18\text{ V}$) vs CMOS
- > Automotive qualified
- > Low noise 40 $\mu\text{V RMS}$

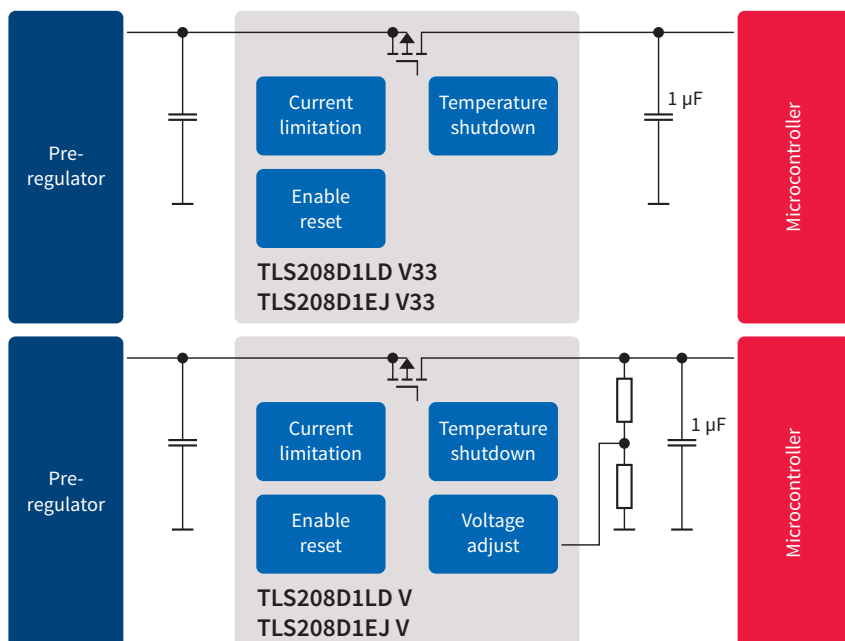
Key benefits

- > Higher safety margin in use with DC/DC (if DC/DC breaks no danger for load)
- > Easy OEM qualification, high quality standards
- > Suitable for low noise applications

Applications

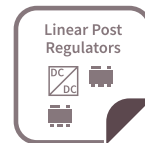
- > Infotainment
- > 8/18/32-bit CPU supply
- > Memory supply
- > ADAS

Application schematic

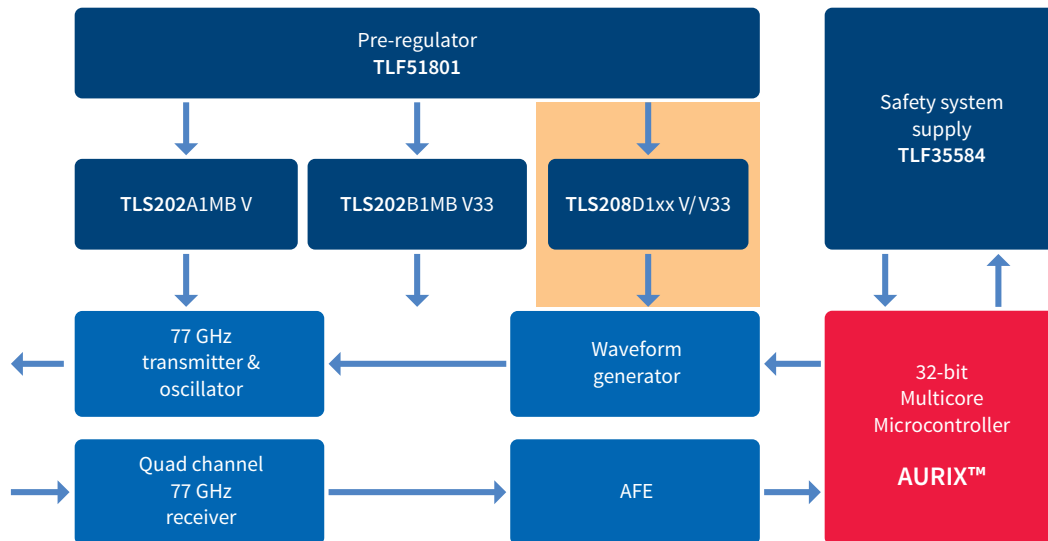


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Application example: 77GHz radar



Order details

Sales name	OPN	V _{output} [V]	V _{input} [V]	I _{output} (max) [mA]	C _{out} [µF]	Package
TLS208D1EJ V33	TLS208D1EJV33XUMA1	3.3	2.7-18	800	1	DSO-8 (exposed pad)
TLS208D1EJ V	TLS208D1EJVXUMA1	Adjustable	2.7-18	800	1	DSO-8 (exposed pad)
TLS208D1LD V33	TLS208D1LDV33XUMA1	3.3	2.7-18	800	1	TSO-10
TLS208D1LD V	TLS208D1LDVXUMA1	Adjustable	2.7-18	800	1	TSO-10

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