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TPS54331DR

XT-ShenZhen® provides you with information about the STM32F030C8T6 microcontroller, I hope it will help you! The STM32F030C8T6 microcontroller is one of the STM32F03 series of microcontrollers, the STM32F0 series of microcontrollers based on STMicroelectronics ARM Cortex-M0, including the entry-level ARM Cortex[™] M0 32-bit RISC core, is a product suitable for low-power applications. If you have a need, we sincerely invite you to cooperate with us, we will provide you with high-quality products and home away from home service!

The TPS54331DR device is a 28V, 3A non-synchronous buck converter that integrates a low RDS(on) high-side MOSFET. The automatic activation of the pulse-skipping Eco-mode feature enables the TPS54331DR device to improve efficiency under light load conditions. In addition, the TPS54331DR device's 1μ A shutdown supply current makes it useful for battery-powered applications.

External compensation calculations are simplified under current-mode control with internal slope compensation, while reducing component count while allowing the use of ceramic output capacitors.

A resistor divider programs the hysteresis of the input undervoltage lockout. Overvoltage transient protection circuitry limits voltage overshoot during startup and during transient conditions. A cycle-by-cycle current limit scheme, frequency foldback, and thermal shutdown features protect the device and load from overload conditions.

The TPS54331DR device is available in 8-lead SOIC and 8-lead SOPowerPAD packages that are internally optimized for improved thermal performance.

The TPS54331DR device is suitable for consumer applications such as set-top boxes, CPE equipment, LCD displays, peripherals and battery chargers, industrial and automotive audio power supplies and 5V, 12V, 24V distributed power systems.

Features:

- 3.5V to 28 input voltage range
- Adjustable output voltage down to 0.8V*

Integrated 80m Ω high-side MOSFET supports up to 3A continuous output current

• High efficiency at light load conditions using pulse skipping power saving mode

- 570 kHz fixed switching frequency
- 1µA shutdown quiescent current (typ)
- Adjustable slow start to limit inrush current

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- Programmable UVLO threshold
- Overvoltage transient protection
- Cycle-by-cycle current limit, frequency foldback and thermal shutdown protection
- Available in an easy-to-use SOIC8 package or thermally enhanced SOIC8PowerPAD[™] package
- Use the TPS54331 to create custom designs with WEBENCH® PowerDesigner

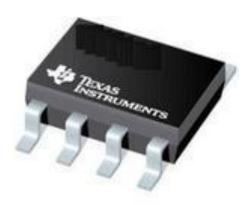
Product parameters

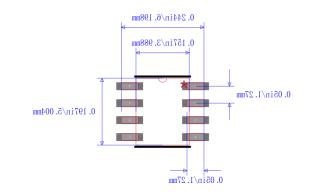
technical parameter	Number of output ports	1
	Quiescent Current	110µA
	On-off level	570千赫
	Input voltage (Max)	28V
	Input voltage (Min)	3.5V
	Output voltage (Max)	25V
	Output voltage (Min)	800mA
		3A
	Output current	150℃
	Working temperature (Max)	-40°C
	Working temperature (Min)	8
	Number of pins	SOIC-8



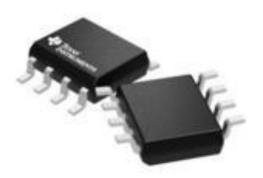
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Product Image





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FAQ

Q: How long does it take you to respond to emails?

A: We will reply to your email within 24 hours!

Q: Do you have a social account like LinkedIn?

A: Yes, you can search for XT-ShenZhen on LinkedIn, YouTube and TikTok.

Q: Does your company have professional inspectors?

A: Yes, in order to ensure product quality, we employ a number of professional engineers.