



**THE DATASHEET OF
A8304SESTR-T**





A8304: Single LNB Supply and Control Voltage Regulator

The A8304 is a single channel low noise block regulator (LNBR). The A8304 consists of a monolithic boost converter followed by a low-drop linear regulator. It is specifically designed to provide the power and the interface signals to an LNB down converter via coaxial cable in satellite TV receiver systems.

The A8304 requires few external components, with the boost switch and compensation circuitry integrated inside of the device. The 704 kHz switching frequency and user-controlled output current limit minimize the size of the passive filtering components.

The I²C™-compatible interface provides control capabilities for complex system requirements, as well as diagnostic capabilities for system fault reporting.

A sleep pin is available to maximize power savings and to quickly shut down the device if needed, without using I²C™ control.

The A8304 is provided in a small 3 × 3 mm QFN package with exposed pad for thermal dissipation. It is lead (Pb) free, with 100% matte tin leadframe plating.

DATASHEETS

Contact [Allegro Marketing](#) for datasheet

SAMPLE & BUY

Contact [Your Local Sales Rep](#)

FEATURES & BENEFITS

PACKAGING

TECHNICAL DOCS

NEWS

Integrated boost MOSFET, current sensing, and compensation
 704 kHz switching frequency for small low-cost components
 SLEEP pin for ultra-low power consumption mode
 Adjustable LNB output current limit (250 to 950 mA*) limit with shutdown timer
 Covers wide array of application requirements
 Minimizes component sizing to fit each application
 For startup, reconfiguration, and continuous output
 Boost peak current limit scales with LNB current limit
 Optional temporary increased current limit (+25%)
 Compatible with DiSEqC1.x control2-wire I²C™-compatible interface for control and status
 Programmable LNB output voltage levels (2% accuracy)
 Enable/disable output
 Flexible 22 kHz tone generation methods
 SINK_DIS bit for controlling the push-pull output sink current threshold
 Diagnostic features: PNG
 Extensive protection features: UVLO, OCP, TSD
 *maximum value depends on PCB thermal design

Product Image



Part Number Specifications and Availability

Part Number	Package Type	Temperature	RoHS Compliant	Part Composition / RoHS Data	Comments	Samples	Check Distributor Stock
A8304SESTR-T	16-lead QFN	-20°C to 85°C	Yes	View Data		Contact your local sales rep	Check Stock
APEK8304SES-01-MH	DEMO BOARD	-20°C to 85°C	No	--		Contact your local sales rep	Check Stock

Allegro's products are not to be used in any devices or systems, including but not limited to life support devices or systems, in which a failure of Allegro's product can reasonably be expected to cause bodily harm.

Looking for pricing, stock, or lifecycle information?

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- ⊖ [Allegro MicroSystems, LLC Information](#)

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- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management