TAT2801

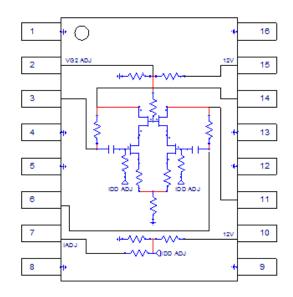
75 Ω CATV Output Stage Amplifier

TriQuint SEMICONDUCTOR



16-pin SOIC Wide Body Package with backside ground paddle

Functional Block Diagram



Pin Description

Pin #	Symbol
1, 4-5, 8-9, 12-13, 16	GND
2	VG2 ADJ
3 / 6	RFIN1 / RFIN2
7	IDD ADJ
10	VDD
11 / 14	RFOUT2 / RFOUT1
15	VDD
Backside Paddle	GND

Ordering Information

Part No.	Description
TAT2801	Docsis 3.0 Edge QAM CATV Output Stage Amplifier
TAT2801-PCB	Docsis 3.0 Edge QAM CATV Output Stage Amplifier Evaluation Board

Standard T/R size = 1000 pieces on a 7" reel

Applications

- CATV Line Amplifiers
- HFC Nodes
- Head End Equipment

Product Features

- Wide Bandwidth (40 MHz 1 GHz)
- 100% production tested for Docsis Edge QAM.
- In-package ESD protection
- Flat Gain
- High Power Compression
- Excellent Input/Output Match
- Low DC Power Consumption
- Bias optimization through external voltage

General Description

The TAT2801 is an ultra-linear, packaged GaAs MMIC amplifier, intended for output stage amplification in CATV infrastructure applications.

The TAT2801 features a single die design, and provides flat gain along with low distortion, making it ideal for use in CATV distribution systems, requiring high output powers and low distortion.

The TAT2801 draws 575 mA from a 12 V supply, while allowing users to adjust the bias current and the bias voltage externally in order to optimize output performance.

The TAT2801 integrates two TQP200002 ESD protection dies, which deliver bi-directional protection with very low leakage currents and extremely low capacitance.

The TAT2801 is packaged in an industry standard 16 pin SOIC WB package.

Please visit <u>www.triquint.com</u> for more details on the TQP200002 device.