## ACPM-9340-TR2 LTE Band 40 MIPI APT PA 2.0 mm × 2.5 mm

# Power Amplifier Module

**Product Brief** 



#### **Description**

The ACPM-9340 is a fully matched 10-pin surface mount power amplifier module developed for LTE Band 40, and it meets stringent linearity power up to LTE (MPR=0 dBm) 28.4 dBm. The 2 mm  $\times$  2.5 mm form-factor package is self contained, and it incorporates 50-ohm input and output matching networks.

The ACPM-9340 features CoolPAM circuit technology that supports two power modes—low and high. The CoolPAM is a stage bypass technology that enhances PAE (power added efficiency) at low power range. The stage bypass feature enhances PAE further at low output range, and it enables the PA (power amplifier) to have exceptionally low quiescent current. Without a DC-DC converter, it dramatically saves average current consumption, extends the talk time of mobiles, and prolongs the battery life. It can be used with the APT (average power tracking) operation to reduce the power consumption when VCC1 and VCC2 are connected to a DC-DC converter externally, which adjusts the VCC1 and VCC2 voltage according to the output power level.

The power amplifier is manufactured on an advanced InGaP HBT (hetero-junction bipolar transistor) MMIC (microwave monolithic integrated circuit) technology that offers state-of-the-art reliability, temperature stability, and ruggedness.

#### **Features**

- Thin package (0.82 mm typical)
- Excellent linearity in APT mode
- MIPI RFFE interface
- Two-mode power
- Ten-pin surface mounting package
- Internal 50-ohm matching networks for both RF input and output
- Separate drive and output VCC supplies
- Green Lead-free and RoHS compliant

#### **Applications**

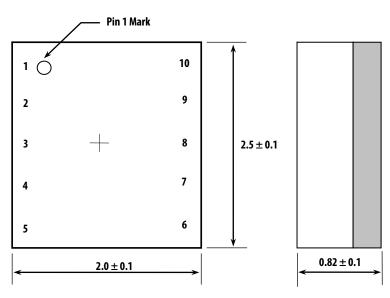
Band 40 TD-LTE

#### **Ordering Information**

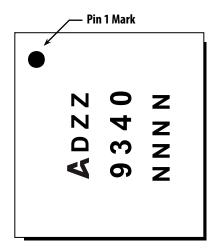
Part Number	Number of Devices	Container
ACPM-9340-TR2	1,000	178 mm (7 in.) tape/reel

## **Package Dimensions**

The dimensions are in millimeters.



## **Marking Specification**



D – Date Code

ZZ – Assembly Lot Identification

9340 - Device Code

#### **Pin Description**

Pin#	Name	Description
1	VCC1	DC supply voltage, connect the first RF stage collector to which APT is applied (0.5V~3.5V)
2	RFIN	RF input
3	VBAT	DC supply voltage, connect to the bias circuitry with a fixed voltage (higher than 3.2V)
4	VIO	RFFE enable
5	SDATA	RFFE data
6	SCLK	RFFE clock
7	GND	Ground
8	NC	No connection
9	RFOUT	RF output
10	VCC2	DC supply voltage, connect to the second RF stage collector to which APT is applied (0.5V~3.5V)

For product information and a complete list of distributors, please go to our web site: www.avagotech.com

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