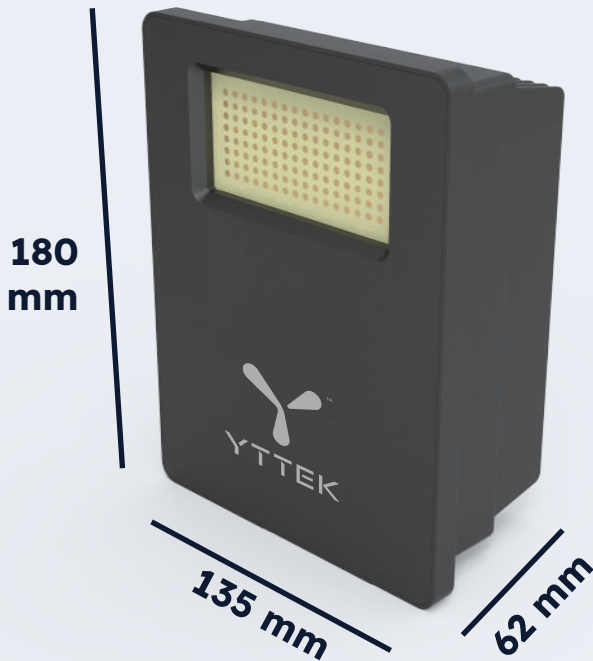


YTFE Series mmWave FEM



YTFE0287 is a 16x8 128-element 28GHz 5G mmWave antenna array front-end module (FEM) dedicatedly developed for the high-speed data conversion subsystem (HS-DCS) interface of NXP LA1224 Bonnyrigg Rev. B Evaluation Platform. YTFE0287 28GHz mmWave FEM internally integrates modulators, demodulators, up/down converters, beam-formers.

A special extra low-cost and high-performance antenna array design to meet both high performance and different coverage strict requirements of commercialization.

Anokiwave
beamformer IC

Anokiwave
up/down converter IC

5G mmWave Applications

RU

ISC

CPE

Repeater

Backhaul

+ n257 operation +
+ **26.5 ~ 29.5 GHz** +

+ Antenna Array +
+ **128-element** +

dual-polarization

**Horizontal
&
Vertical**

TDD half-duplexing operation

**MI
MO**

+ per polarization +
+ **800 MHz bandwidth** +

+ TX linear output power +
+ **61 dBm @3% EVM** +

Beam Scan

volume +/-60 for each Elevation and Azimuth

loss 4dB @ 60 degrees

Beam Switching

time 4us @10MHz SPI clock rate

Control **////**

6-bit phase control (LSB=5.625deg)

5-bit gain control(LSB=0.5dB)

SPI/GPIO configuration and control interface

Peripherals **////**

1 Samtec ERF8-050 interface

1 mini-B USB interface

Integration with NXP LA12xx **////**

NXP Bonnyrigg HS-DCS interface

Drivers for LA1224 ready

Baseband analog I/Q signal input/output