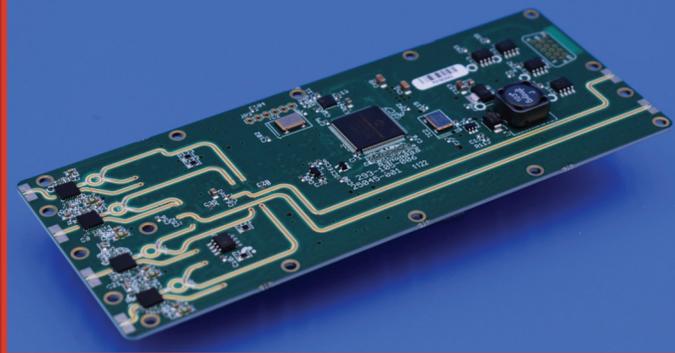


Four Channel X-Band T/R Module



This module is a fundamental building block for an X-Band AESA. This subsystem is used in radar, satcom and terrestrial 5G applications.

Application

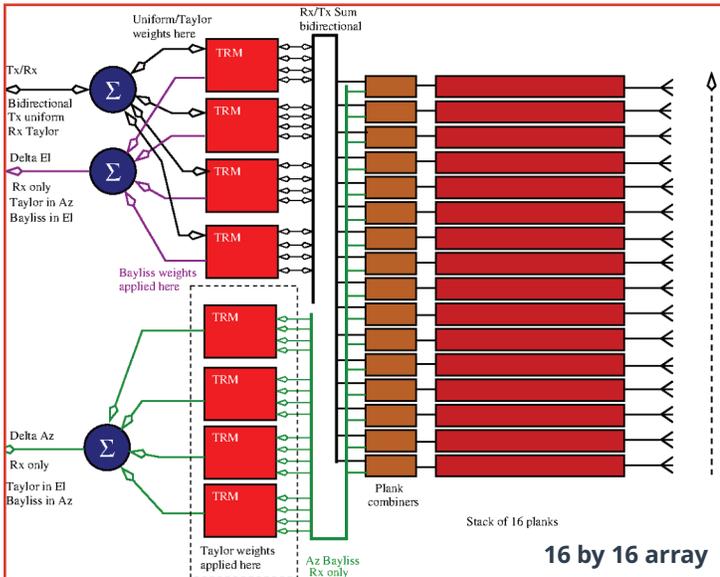
- For use in any type of antenna array where active scanning or beam forming is required - radar, satcom, 5G, interference-mitigating/anti-jamming arrays.
- Half-duplex operation: time domain duplexing.
- Easily scaled - large arrays built by stacking modules.
- Easily interfaced with different radiating elements - patch or tapered slot arrays.

Options

- Custom frequency ranges from L to Ku band
- Custom Tx power levels
- Choice of thermal management - air or liquid cooling
- Command/telemetry interface to suit your transceiver

Key Features

- Four element linear array
- Air cooled
- Compact footprint
- Readily stackable for scaling up to large 2D arrays
- Fully programmable phase and amplitude excitation
- Programmable scan patterns
- Fully differential RS485 data interface and control signals

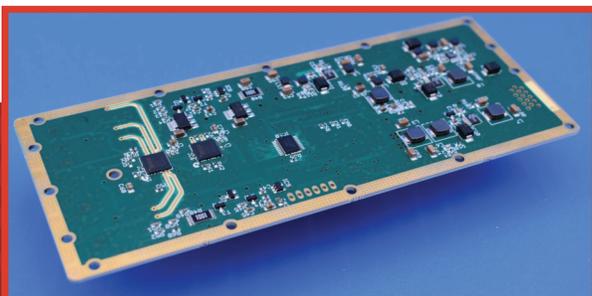


About us

Orban Microwave, founded in 1996, designs and manufactures advanced antennas and RF subsystems for space, radar, GNSS, and avionics applications.

We deliver high-quality, reliable, and efficient solutions supporting military, commercial, and industrial missions.

Our portfolio includes antenna arrays, AESA systems, wideband and omnidirectional antennas, quadrifilars, and a range of RF products such as T/R modules, power amplifiers, low-noise amplifiers, transponders, and RF switches.



Specifications

- Rx gain: 22dB
- Tx gain: 40dB
- Noise figure: 3.5dB
- Tx power: 33dBm/channel (39dB total for 4 channels)
- Phase span: 360 deg.
- Phase step: 2.8 deg.
- Gain range: 31 dB
- Gain step: 0.5dB
- TR switch time < 500ns
- DC supply voltage: 32V
- RS485 data rate: 20Mbit/s

Dimensions

- 172 x 72 x 18mm

Contact us for additional details

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