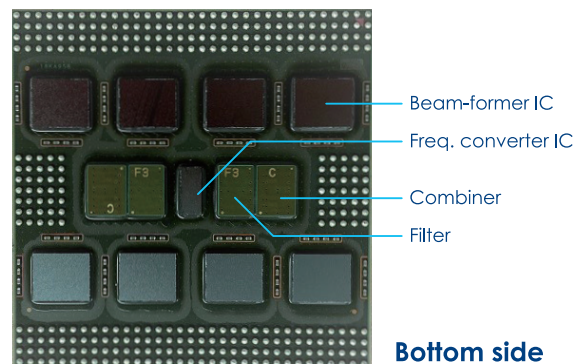
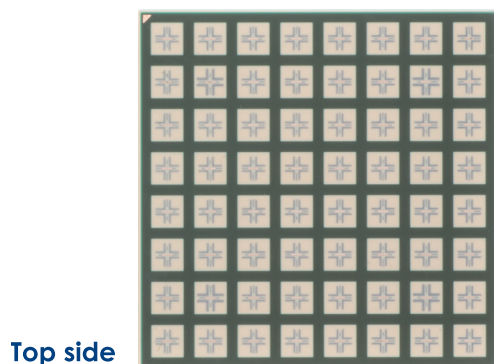


FutureAccess™

28GHz Phased Array Antenna Module(PAAM)

Overview

Fujikura PAAM operates at 24-30 GHz and supports concurrent dual-pol. It integrates RF-ICs, filter and array antenna and benefits customers with optimal TCO and reduced development time.



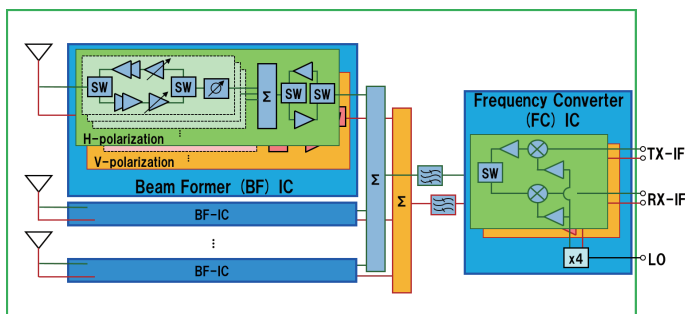
size(mm): 42.5(W) x 42.5(H) x 2.5 (D)

Features

- Fast beam-switching of <220 ns*1, supports >30,000 beams
- High power-efficiency optimization with >20% peak PAE
- Scalable configuration with 8x8-element PAAM as a unit
- Calibration free

*1: including command transaction time

Block diagram



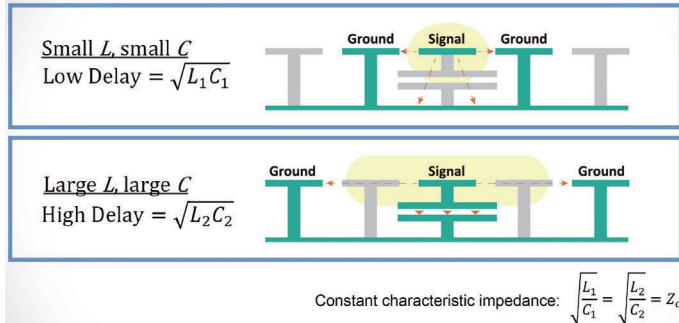
Evaluation board



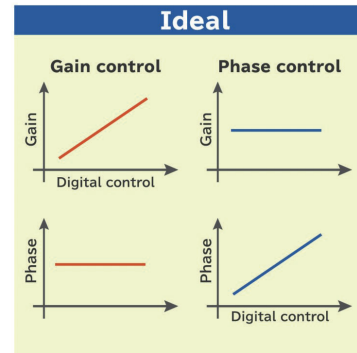
Tunable true-time-delay phase shifter

~ enabling precise and calibration-free gain/phase control ~

Phase control using tunable transmission line phase shifter



Tunable transmission line



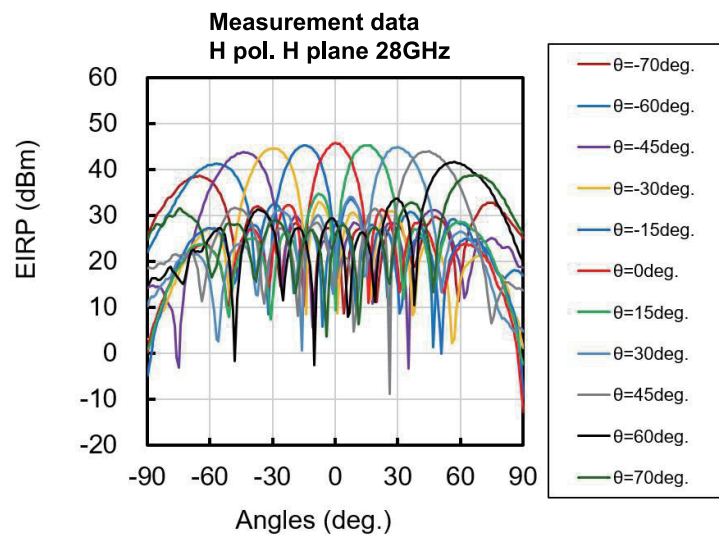
Independent gain/phase control

Typical performance

Frequency	24.25 to 29.5 GHz
Band	n257/n258/n261
Polarization	Vertical, Horizontal
Beams number	2T2R
Beam-scan range	Elevation: $\pm 60^\circ$ Azimuth: $\pm 60^\circ$
EIRP	45 dBm (8dB backoff from P1dB)
Beam states	>30,000
Beam switching time *1	<220 ns
Power consumption	Tx: 16 W , Rx: 7 W Dual Polarization
Rx NF	4 dB(typical)
Supply voltage	1.2V/1.5V/1.8V/2.7V

*1: including command transaction time

Beamforming performance



Applications



- Fixed Wireless Access
- Mobile Wireless Access
- Backhaul
- Private 5G

Part Number	Frequency
FA28PMD88B-F1	24.25–26.10 GHz
FA28PMD88B-F2	25.65–27.50 GHz
FA28PMD88B-F3	26.50–28.35 GHz
FA28PMD88B-F4	27.65–29.50 GHz

Caution :

The values in this table are reference, not the values for guaranteeing.
All contents in this paper are subject to change without notice.