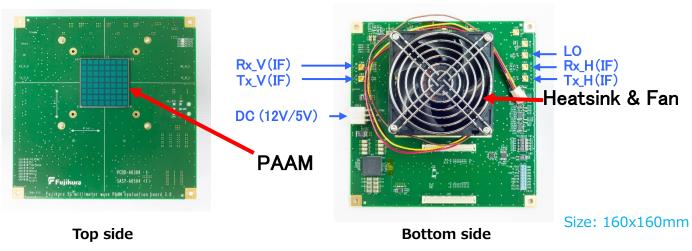
FutureAccess<sup>TM</sup> Type-C

28 GHz Phased Array Antenna Module (PAAM) Evaluation Board Kit

#### Overview

PAAM Evaluation Board Kit is for performance evaluation of PAAM using external measuring instruments. This board kit consists of PAAM Evaluation Board and Avnet FPGA board MicroZed<sup>™</sup> to control PAAM. You can evaluate RF performance of PAAM such as EIRP, EVM and so on by connecting this board kit to a signal source and signal analyzer. \*Manufactured by AMD

## External view



Evaluation board equipped with PAAM "FutureAccess™" Type−C

### Features

- Calibration-free; precise beam control without gain/phase calibration
- Quick and easy evaluation by connecting IF input/output signals and LO input signal
- Complete RF functionality implemented in PAAM; BFIC, FCIC, patch antenna, filter
- Simple PAAM operation using PC via on-board FPGA

### Applications

- 5GNR Mobile Base Station
- Fixed Wireless Access / Wireless Backhaul
- Local 5G / Private 5G
  Repeater

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# Typical Performance

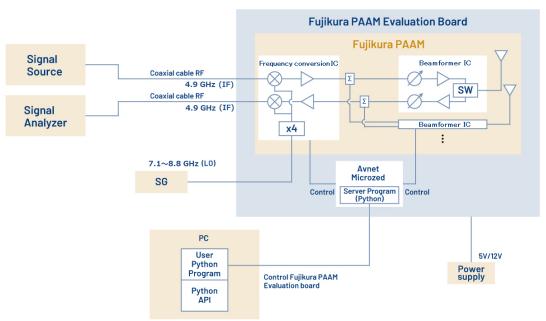
Frequency range	24.25 to 29.50 GHz	
Band	n257/n258/n261	
Polarization	Horizontal, Vertical	
Number of beam	2T2R / unit	
Beam steering range	Elevation: +/-60° Azimuth : +/-60	
EIRP at EVM 3%	48 dBm	
Beam states	>20,000	
Beam switching periodicity <sup>*1</sup>	<220 ns	
Power consumptiion <sup>*2</sup>	Tx: 36 W , Rx: 15W Dual polarization enabled	
Noise Figure	5 dB	
Supply voltage	5V/12V	
*1 including command transaction time		

## Part number (Evaluation board kit)

Part number	Description
FA28PMD88C-F5-EVB	Fujikura PAAM Evaluation Board Kit - 26.50 - 29.50 GHz
FA28PMD88C-F6-EVB	Fujikura PAAM Evaluation Board Kit - 24.25 - 27.50 GHz

\*2 PAAM Only

## **Block diagram**



Please note that Evaluation board includes only blue block.

## **Board Kit includes**

- •PAAM Evaluation Board
- •Power supply cable (for Eval-board, cooling fan)
- Instruction manual (hardware, software)

# Board Kit doesn't include

- IF Amplifier
- Power supply (DC:12V/3A, 5V/2A)

## **Contact Information**

E-mail: <u>mmwavetech@jp.fujikura.com</u>

- •FPGA board Microzed™
- Fixture
- Coaxial cable RF x 5
- Signal Source, Signal Analyzer, SG

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PC, LAN cable, Switching HUB

#### Note;

- The values on the table shown above are preliminary, not guaranteed. • Please refer to the PRODUCT WARRANTY (MW96-11-22-0044) for
  - more detail.
- •All contents in this brief are subject to change without any notice.



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