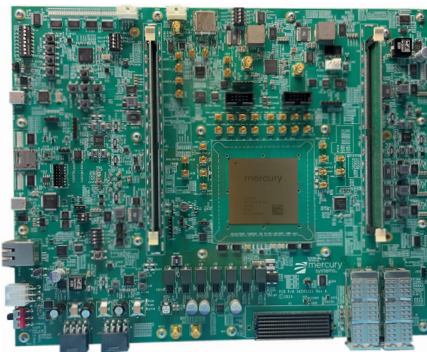


EB-RFS1140

Evaluation board for RFS1140 System-in-Package (SiP)

Test and evaluate the analog signal chain on the RFS1140 SiP

- Evaluate RF digitization and signal generation
- Create early product prototypes for RF applications
- Low-latency, high-bandwidth connector options for SOSA capable clustering and data exchange on-chip memory
- PCIe endpoint operation enabling



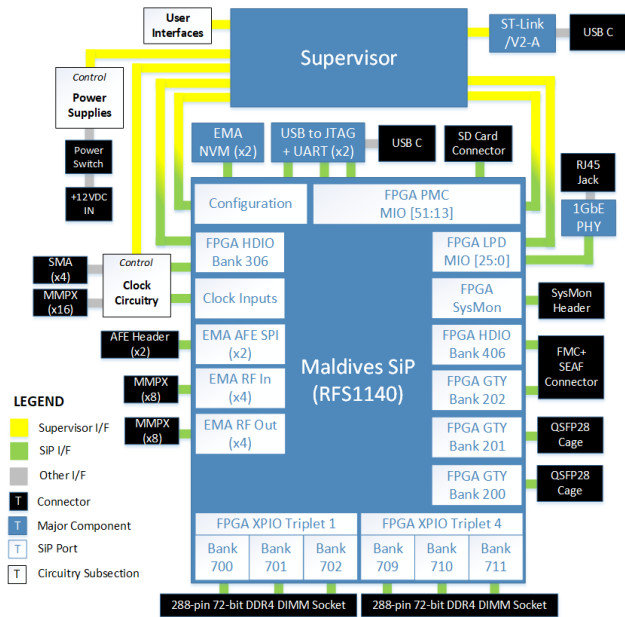
Test and evaluate analog signal performance for radar, instrumentation, electronic warfare and other RF applications on Mercury's RFS1140 Direct RF SiP with the EB-RFS1140 evaluation board (EB).

The EB-RFS1140 comes with SMAs that can connect directly to baluns and filters to easily configure analog front end and speeds application development.

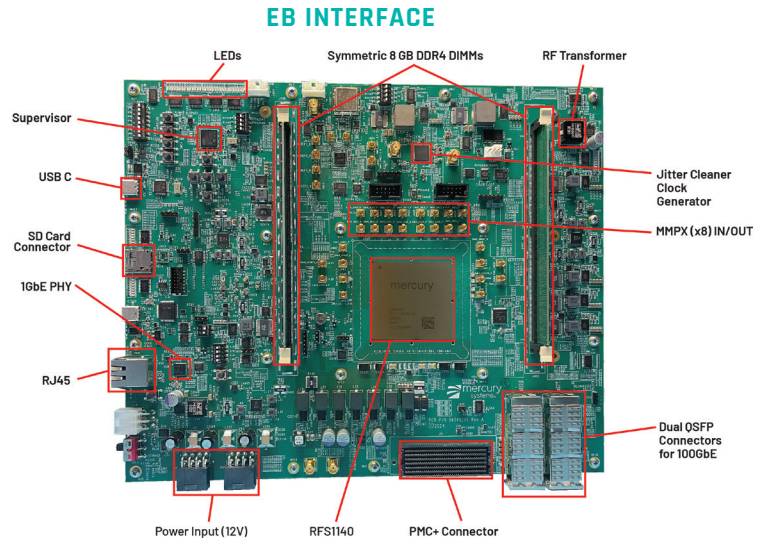
Features

- Differential pair RF and clock inputs for external signal generators
- Dual QSFP connectors for 2 x 100GbE
- Symmetric 8GB DDR4 DIMMS option for best capture bandwidth and storage for each Electra-MA sensor
- 1GbE management/control interface for low bandwidth sweep tools command/control packets
- Dual-parallel QSPI NOR flash or SD Card boot options
- USB-to-JTAG and UART for debug and shell command interface
- Four lane GTY bank and HDIO bank routed to FMC+ connector for custom applications
- FMC+ to PCIe finger connector cable for potential x4 PCIe endpoint operation (available from Samtech)
- Recognized in AMD-Xilinx Vivado/Vitis tools for BSP and drivers
- Linux and bare metal flash image options with radio/capture application software and firmware for easy out-of-the-box user experience
- EB PCIe lanes routed to PCIe 4.0 specifications
- Specialized cooling solution for maximum use of AMD ACAP fabric

Evaluation Board for RFS1140 System-in-Package (SiP)



CEB Block Diagram



KIT CONTENTS

- EB-RFS1140
- USB cable
- SD card
- Ethernet cable
- Power supply and power cable

ORDERABLE PART NUMBER

- EB-RFS1140-E: Early access RFS1140 EB kit

ADDITIONAL RESOURCES

- User Guide

CUSTOMER SUPPLIED MATERIALS

DESCRIPTION	MANUFACTURER	PART NO.	QTY
Broadband balun	Hyperlabs	HL9404	4
MMPX male to 2.92 mm male, 40 GHz, phase matched <1ps	RF Coax Inc.	XK086MMHFJ-6-1 or XK086MRMHFJ-6-1	8
RF cable 2.92 mm to 2,92 male, 36in.	Fairview Microwave	FMC2929085LF-36	4
DC block (optional for ADC)	SHF	DCB45R-A	8
RF cable SMA to SMA male, 36in.	Fairview Microwave	FMC0202085LF-36	1



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