

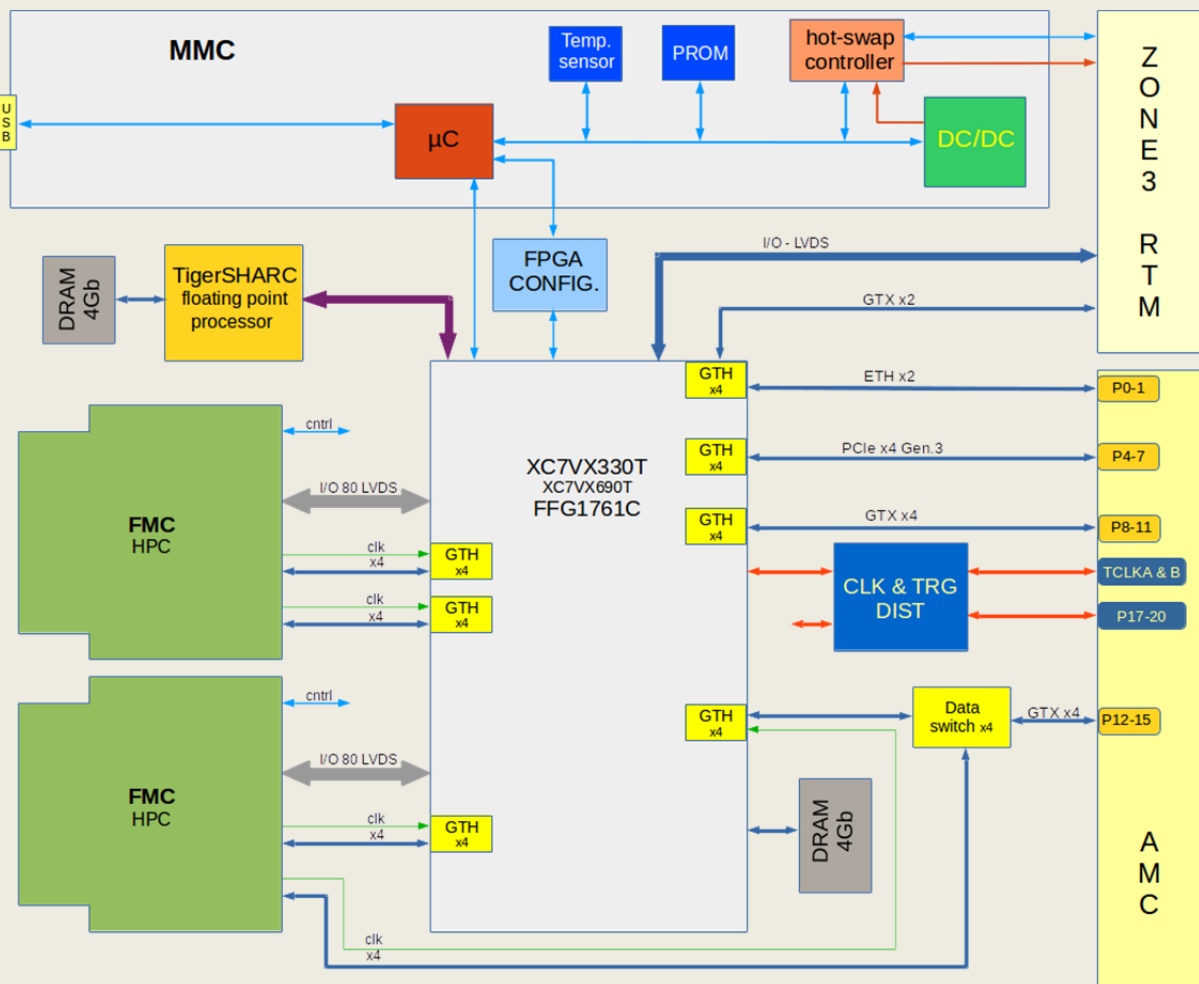
## EAMC-FMC270 FMC Carrier Board

### General Description:

The EAMC-FMC270 is an AMC FPGA Carrier with two FMC (VITA 57) interfaces. The EAMC-F270 is compliant to the AMC.4 specification. The unit has an on-board, reconfigurable FPGA Xilinx Virtex 7 which interfaces directly to AMC backplane, FMCs, DRAM, and floating point processor TigerSHARC. The board provides 2 PCIe Gen.3 endpoints for redundant operation and fast links to ports P12-15. Provided hardware and software (firmware, drivers, EPICS interface, example applications) accelerate integration of the board into a data acquisition or control system.

**eicSys offers customization of software/firmware according to customer specification.**

### Block diagram



Specification is subject to change without further notice

Description			
<b>Architecture</b>			
<b>Physical</b>	Dimensions	Double width, mid-size Width: 5.486" (148.5 mm) Depth: 7.110" (180.6 mm)	
<b>Standard</b>	AMC.0, AMC.1, AMC.2, MTCA.4 Module management	Advanced Mezzanine Card  IPMI version 2.0, MMC V1.0 compatible	
<b>Compatibility</b>	Zone3 classification Compatible AMC products	Class D1.0 ERTM-RFI 8; DRTM-VM 2	
	Compatible FMC modules	<ul style="list-style-type: none"> <li>➤ EFMC-D081</li> <li>➤ EFMC-D082</li> <li>➤ EFMC-DIO1</li> </ul>	
<b>Configuration</b>			
<b>Electrical properties</b>	Power consumption	< 50 Watt	
<b>Chipset</b>	XILINX, <b>Virtex 7</b> , XC7VX330T-2 or XC7VX690T-2 Analog Devices <b>TigerSHARC</b> floating point processor		
<b>Memory</b>			
<b>Connectivity</b>			
<b>Frontpanel</b>	FMC slots	2 x HPC	8 x GTH Links (10 Gbps) I/O – 80 LVDS control signals (3.3V)
	USB 2.0	Debugging Interface	
<b>Backplane</b>	Interfaces	Port 0;1 Port 4-7 Port 8-11 Port 12-15	<ul style="list-style-type: none"> <li>➤ GBeth</li> <li>➤ PCIe x4 Gen. 3</li> <li>➤ PCIe x4 Gen. 3/ high speed 10Gbps</li> <li>➤ High speed/ 10Gbps</li> </ul>
	Clock Signals		TCLKA, TCLKB, RTM, FCLK
<b>Others</b>			
<b>Environmental</b>	Temperature Range	Operation 0° C-+55°C Storage -40°C- +85°C	
	Humidity	5-90% non-condensing	
	Weight	0,4 Kg	
<b>Ordering Information</b>		<b>EAMC-FMC270-32 - XC7VX330T-2</b> <b>EAMC-FMC270-92 - XC7VX690T-2</b>	

Datasheet – 21.08.2015, Rev. 1.2

Developed by:  
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