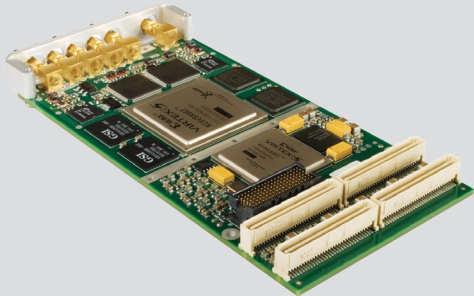


Analog I/O & Receiver Summary

- ◆ 8 to 16-bit resolution
- ◆ Wide range of sample rate solutions (KSPS, MSPS and GSPS)
- ◆ PMC, XMC, FMC and VME options
- ◆ Air-cooled commercial to rugged conduction-cooled builds
- ◆ User programmable FPGAs
- ◆ Products for a wide variety of applications including EW, ECM, ELINT, SIGINT and SDR

Figure 1: PMC Digital Receiver (Curtiss-Wright's E2202)



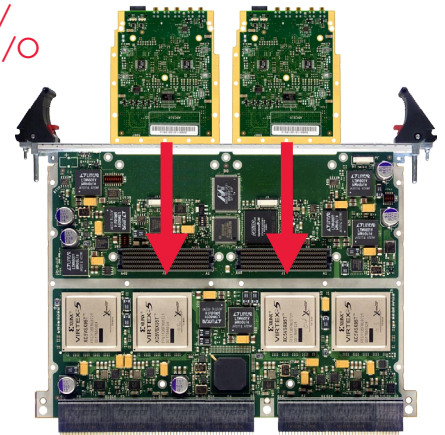
Analog I/O Solutions

At the threshold between the real world of analog signals and the digital domain, system engineers rightly demand exceptional signal-to-noise ratios, minimal distortion and the highest possible resolution from the conversion process. Curtiss-Wright Controls Embedded Computing has over 20 years experience in the design and production of high-quality COTS signal acquisition hardware on VME and PMC platforms that can cope with the toughest operating environments. This expertise is now applied to the latest generation of COTS platforms, including XMC (VITA 42) and FMC (VITA 57.1), helping designers address the most demanding requirements.

Digital Receivers & FPGA Processing

The use of FPGAs in DSP systems has proven to be a revolutionary step in the quest for increased processing performance. FPGAs excel at computing applications characterized by repetitive, fixed-point, highly parallelized operations. Digital Down Converters (DDCs), FFTs, filters, pulse compressors, data encryption and decryption are examples of functions that FPGAs perform well for applications such as radar, signal intelligence and image processing. Curtiss-Wright's FPGA based products are focused on effectively combining both processing and I/O roles.

Figure 2: Quad FPGA Processor/ Digital Receiver with Dual FMC I/O Sites



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Analog I/O Receiver Summary

Table 1: Analog I/O and Receiver Cards

Product	Format	Analog Input				Analog Output			FPGA/Host	Ruggedization	Comments
		Chans	Res	Max Sampling Rate	Input Bandwidth	Chans	Res	Max Sampling Rate			
AD3000	PMC/XMC	1	8b	3000 MSPS	>2.25 GHz	-	-	-	SX95T	AC 0, 100 CC 200 ¹	-
ADC512	FMC	2	8b	3000 MSPS	>2.25 GHz	-	-	-	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200	-
AD1520	PMC/XMC	2	8b	1500 MSPS	>2.0 GHz	-	-	-	SX95T	AC 0, 100 CC 200 ¹	-
ADC513	FMC	4	8b	1500 MSPS	>2.0 GHz	-	-	-	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200	-
ADC510	FMC	2	12b	550 MSPS	>1.5 GHz	-	-	-	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200 ¹	Onboard sample clock generator
FMC-518	FMC	4	14b	500 MSPS	700 MHz	-	-	-	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200 ¹	Onboard sample clock generator
FMC-516	FMC	4	16b	250 MSPS	700 MHz	-	-	-	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200 ¹	Onboard sample clock generator
ADC511	FMC	2	14b	400 MSPS	>1.2 GHz	-	-	-	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200 ¹	Onboard sample clock generator
E2202	PMC	2 or 4	16b	160 MSPS	>350 MHz	-	-	-	SX95T	AC 0, 100 ¹ CC 200 ¹	
ADC-MOD2	PMC/XMC (host)	2	12b	125 MSPS	-	-	-	-	PMC-FPGA05 (Virtex-5 LX110), XMC-FPGA05D (Virtex-5 SX95T)	AC 0	Requires PMC/XMC host
E2200	PMC	2	14b	105 MSPS	300 MHz	-	-	-	XC2V3000	AC 0, 100 CC 100	Also known as RAD2
DMVE2104	VME	32	16b	up to 200kSPS		4	16b	up to 200kSPS	N/A	AC 0, 100 CC 100	shared ADC/DAC
FMC-520	FMC	-	-	-	-	2 (4)	16b	1 GSPS (500 MSPS)	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200 ¹	1 GSPS interpolated, 500 MSPS non-interpolated
DAC-MOD1	PMC/XMC (host)	-	-	-	-	2	12b	210 MSPS ²	PMC-FPGA05 (Virtex-5 LX110), XMC-FPGA05D (Virtex-5 SX95T)	AC 0	Requires PMC/XMC host
E2600	PMC	-	-	-	-	2	14b	200 MSPS	XC2V3000 or XC2V3000	AC 0, 100 CC 100	QAM DAC Also known as RAD-T2
XCLK1	PMC/XMC					6	-	>2 GHz	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200 ¹	Clock generator module
FMC-XCLK2	FMC					4	-	>2 GHz	Virtex-5/6 FMC host - contact factory	AC 0, 100 CC 200 ¹	Clock generator module

Notes:

1. Contact factory for availability
2. Limited to 150 MSPS when used with PMC-FPGA05 or XMC-FPGA05D