

µWRAP 25G

High-speed record / playback for up to 24 TB of optical data



Features

Compact system for recording and playback of data in real time Reduces SWaP by eliminating the need for a host computer Data formats (via SFP/+ ports): 1–10GbE; STM1–64; OTU1/2/2e/2f Data rates: Up to two 12.5 Gb/s datastreams, with framing Storage (SSDs): 2 or 4 (6 TB each, 12 or 24 TB total) Processor: AMD G-series Processor memory: 8 GB Operating system: Linux Available: EDT uWRAP 25G software EDT intellectual property for 10GbE PCS and PMA layers, SONET/SDH framing, demultiplexing, G.709 framing

Description

The μ WRAP 25G is a compact system for recording and playback of up to two real-time 12.5 Gb/s datastreams with framed data capture. With 12 or 24 TB of data storage and two high speed optical interfaces, it provides a reduced size, weight, and power (SWaP) record / playback solution in a small, self-contained system.

Each optical blade has one SFP/+ to record and play back up to 10GbE, STM64, or OTU2f, plus FPGA resources for framing, aligning, and descrambling datastreams. The SFP/+ also supports PCAP record-playback for 10GbE.

The open system is powered by an AMD G-series processor (x/86 architecture) running Linux with 256Gb system storage with 8Gb DDR3 SDRAM.

System control is via multiple ethernet ports. Command and control operations are exposed via a RESTful interface for easy tool integration.

Applications

High-speed recording and playback Telecom testing Simulation Network analysis

Supported Formats	STM4/16/48, OTU1/2/2e/2f				
Data Storage	NVMe SSD		12 or 24 TB		
System Processor	Device (x86-based) AMD GX-210HA (default) AMD GX-420CA (optional)	Cores 2 (10 W total) 4 (25 W total)	Clock rate 1.0 GHz 2.0 GHz	Shared L2 cache 1 MB 2 MB	GPU clock rate 300 MHz 600 MHz
System Storage	SSD		256 GB		
System Memory	SDRAM: DDR3		8 GB		
Network Boot Protocol	iscsi				
Transceivers	On each of the one or two optical interfaces, Port 0 supports one SFP/+ transceiver with the options shown below.				
		ELECTRICAL (1GbE)	OPTICAL	0===/-+	0=0/-+
	<u>PORT O</u>	SFP only	<u>SFP/+*</u>	<u>SFP/+*</u>	<u>SFP/+*</u>
	Output power (dBm) Center wavelength (nm) Sensitivity (dBm) Max. input power (dBm) Connector * An SFP at 1550, 1310, or 4 An SFP+ at 1550 or 1310	– – – RJ45 transceiver 850 nm can support 1GbE, 0C3 nm can support 10GbE, 0C192	-2 to +3 / 0 to +4 1500-1580 / 1530-1565 -28 / -23 -9 / -7 LC 8/12/48 (STM1/4/16), or 0TU1 (STM64), or 0TU2/2e/2f - c	-9.5 to -3 / -8.2 to +0.5 1270-1360 / 1260-1355 -18 / -10.3 0 / +0.5 LC or, at 850 nm, 10GbE only.	-9 to -2.5 / -5 to -1 830-860 / 840-860 -18 / -7.5 0 / +0.5 LC
System Interfaces	System control, 1 GbE System control, 1 GbE System control, USB 2.0 x2, not intended for normal use System display, not intended for normal use Data I/O		RJ45 SFP microUSB DisplayPort++ (with conversion cable, allows for DVI, HDMI, or VGA) SEP/+ transceiver (x2) - for data formats shown above		
Power	Input voltage range Consumption (dependent on configuration) Power control Power input		10-60 VDC Typically 100 W with two optical interfaces 100 MbE, RJ45 connector 10-60 VDC, 6-pin Lemo connector		
Physical	Weight Dimensions		TBD - about 3.25 lbs. (with six SSD blades installed) 9.60 x 5.75 x 1.61 in. (including connectors)		
Environmental	Temperature (operating / non-operating) Humidity (operating / non-operating)		0° to 55° C / -40° to 70° C (ambient) 1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C		
System	Operating System Record / Playback, utilities	and control	CentOS 7 Via Pre-installed GUI and command-line applications		

Ordering Options

- Data storage: **2** / 4 SSD blades (6TB ea.) - Transceivers: [see options above]

Bold is default. Ask about custom options.

International Distributors



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