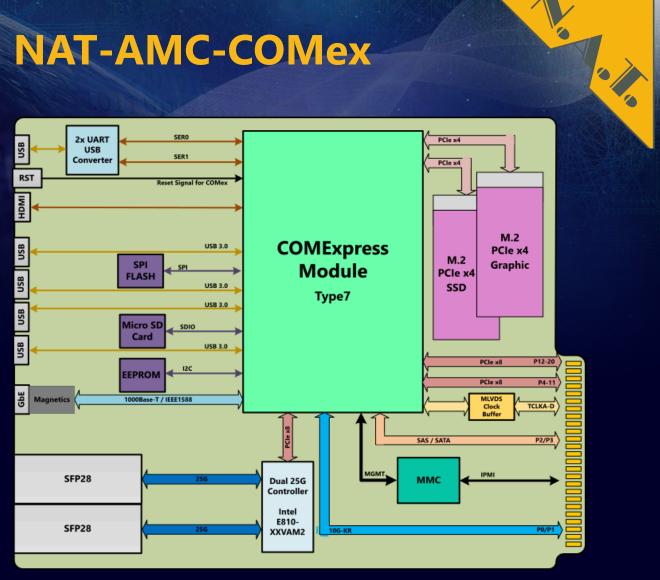
NAT-AMC-COMex



The NAT-AMC-COMex is an COMExpress (COMex) carrier board in double full-size AMC form factor. As the name implies, a COMExpress module is a Computer-on-Module, which means, it concentrates the core functionality of an x86 processing system on one single PCB. This includes CPU and memory functionality, graphics, and the most common interfaces.

Different types of COMExpress modules have been designed for different applications. Thus, the choice of the type determines the application field of the NAT-AMC-COMex. So the carrier board can work as a general purpose processor AMC (PrAMC), storage, or graphics solution if combined with the appropriate COMExpress module.

The NAT-AMC-COMex supports any COMex module Type7 validated by NAT. It offers PCIe Gen4 x8 at ports 4-11 and 12-20 at the backplane. Moreover, it provides 2x 10G Ethernet via port0/1, 2x 25G Ethernet via SFP28 front uplink, and a 1G Ethernet link via RJ45 at the front panel.

One M.2 PCIe x4 interface is intended for mounting a memory device, a second one can be equipped with a graphic card. If so, the board provides an HDMI interface at the front

Thus, the NAT-AMC-COMex offers a wide range of setups from well-priced to high-

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	AIVIC COIVICA	
	Form Factor	
	Double-width, full-size AMC	
	• Width: 147 mm, Depth: <180.6 mm	
	Mounting Slot	
	For any type of COMExpress-Type 7 module validated by N.A.T.	
	On-Board Resources COMex Type-7	
MMC	Microchip ATxmega128	
Ethernet Controller	Dual 25G Intel Ethernet Controller E810-XXVAM2	
Storage	MicroSD-Card	
Storage	M.2 PCIe x4 memory interface for SSD, FLASH	
Graphic	M.2 PCle x4 graphic module (option)	
Front Panel Connections	HDMI port (option)	
	• 4x USB 3.0	
	• 1x 1G Ethernet vis RJ45	
	• 2x SFP28 (25G Ethernet)	
	• Debug	
	• IPMI	
Backplane	• AMC Port 0/1: 10G-KR	
Interconnect	AMC Port 2/3: SAS / SATA	
	• AMC Port 4-11 / 12-20: PCle x8 Gen4	
	• TCKLA-D	
	LEDs	
	Standard AMC LEDs (Status, Fault, Hot-Swap)	
	Compliance	
	• MTCA.0 / MTCA.4	
	• AMC.0 • AMC.1	
	• AMC.2	
	• IMPI V2.0	
	• HPM.1	
	Environmental	
Operating	default: 0 to +50 degrees Celsius	
Environment	Humidity: 5% to 95% (non-condensing)	
Storage	default: -40 to +100 degrees Celsius	
Environment	Humidity: 5% to 95% (non-condensing)	

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