

Component Options

MAGIC2 Component Options		
Category	Component	Description
Slot 1(CPU)	SBC3513L	Intel Xeon 11th Gen, Tiger Lake, 8 Core, 2.6GHz, 64GB DDR4, 100GbE, 480GB SSD, SOSA Aligned
	SBC3511	Intel Xeon Coffee Lake R, 6 Core, 12-thread, 2.8GHz+, 40GbE, 256GB SSD, SOSA Aligned
	SBC329	Intel Xeon E-2276ME 7th Gen, 4 Core, 16GB DDR4, 32GB SSD, TPM
Slot 1(XMC)	RAR15X	I/O Expansion, Avionics, MIL-STD-1553 / ARINC 429
	TXMC395	TEWS 4 channel ethernet NIC, 1000BASE-T / 100BASE-TX / 10BASE-T
	No Load	
Slot 2(CPU / GPU)	GRA117S	GPU, NVIDIA RTX ADA5000, 18GB GDDR6, 9,728 CCs, 304TCs, 76 RTCs, SOSA Aligned
	GRA116S	GPU, NVIDIA RTX A4500, 8GB GDDR6, 5120 CCs, 160 TCs, 40 RTCs, 17 TFLOPS
	GR5	GPU, NVIDIA Quadro P2000, 768CCs, 4GB GDDR5, 2.3 TFLOPs
	SBC3513L	CPU, Intel Xeon 2.6Hz, 8 Cores, 64GB DDR4, 100GbE, 480GB SSD, TSN, SOSA Aligned
	SBC3511	CPU, Intel Xeon Coffee Lake R, 6 Core, 12-thread, 2.8GHz+, 40GbE, SOSA Aligned
	PEX431	XMC Carrier, Non-Blocking PCIE Switch, 6 x4 PCIe Gen 3.0
	No Load	
Slot 2(XMC)	NVA2104	GPU, NVIDIA RTX A2000, 8GB GDDR6, 2560 CCs, 80 TCs, 20 RTCs, 8.25 TFLOPS
	NVP2102A	GPU, NVIDIA Quadro P2000, GP107, 780 CUDA Core, 4GB GDDR5, 2.3 TFLOPs
	NVP2102	GPU, NVIDIA Quadro P2000, 780 CUDA Core, 4GB GDDR5, 2.3 TFLOPs
	No Load	
IO Panel	5	J1, J2, J3, General, Avionics, 3G-SDI In/Out
	4	J1, J2, General
	3	J1, J2, J3, General, MAGIC1A Legacy, 3G-SDI Out
	2	J1, J2, General, MAGIC1A Legacy
	1	J1, J2, General, Avionics, HD-SDI In/Out, Dual SBC
Cooling	Fan	Forced air fan with lateral fins
	Fin	Side mounted cooling fins. Designed to be used in addition to cooling plate.
	Finless	Straight walled chassis. Designed to be used with cooling plate if needed.
Power Supply	Hold Up	12-28VDC input, 180W at 50ms Hold Up, Vita 62 Compliant
	Standard	12-28VDC Input, Vita 62 Compliant
Memory	No Load, 1, 2, 4, 8 TB	Rugged SSD (MLC). Front removeable or non-removeable options, and 500 and 100K mate cycle options
Finish	Various	White Paint, Black Anodize, Custom
SW	Linux	Network bootable reference image
	No Load	

*Contact Abaco for component interoperability.

Variants

MAGIC2 Pre-Configured Variants						
Name	Description	IO Panel	Slot 1	Slot 1 XMC	Slot 2	Slot 2 XMC
Echo	CPU + GPU, Sosa Profile Modules	5	Intel Xeon Tiger Lake (SBC3513L)	No Load	NVIDIA ADA5000 (GRA117S)	No Load
Delta	CPU + GPU Avionics, 3G SDI I/O	5	Intel Core i7 Raptor Lake (SBC3215)	Avionics I/O (RAR-15)	XMC Carrier Card (PEX431-5)	NVIDIA A2000 (NVA2104)
Charlie	CPU + GPU General, Avionics I/O	4	Intel Core i7 Raptor Lake (SBC3215)	Avionics I/O (RAR-15)	NVIDIA A2000 (GRA116OP)	No Load
Bravo	CPU + GPU, Legacy I/O , 3GSDI Output	3	Intel Core i7 Raptor Lake (SBC3215)	Network Interface Card (TXMC395)	XMC Carrier Card (PEX431-5)	NVIDIA P2000 (NVP2102)
Alpha	Dual CPUs + GPU Avionics I/O	1	Intel Xeon Tiger Lake (SBC3513L)	Avionics I/O (RAR-15)	Intel Xeon Tiger Lake (SBC3513L)	NVIDIA A2000 (NVP2102A)

IO

MAGIC2 I/O Table					
	I/O Panel Number				
	1	2	3	4	5
1000BASE-T Ethernet	4	4	4	—	—
2.5GBASE-T Ethernet	—	1	1	1	1
3G-SDI In	4	—	—	—	3
3G-SDI Out	2	—	1	—	1
RS-232/422/485	2	1	1	1	—
RS-232	—	1	1	1	1
USB 2.0	4	4	4	2	2
CPU 3.3V GPIO	8	2	2	4	4
Stereo Audio In	2	1	1	—	1
Stereo Audio Out	—	1	1	—	—
MIL-STD-1553	4	—	—	4	4
ARINC 429 RX	4	—	—	8	8
ARINC 429 TX	3	—	—	7	7
Avionics Discretes	12	—	—	6	6
PAL/NTSC In	2	—	—	—	1
CPU DisplayPort Out	2	—	—	—	—
GPU DisplayPort Out	—	—	—	2	—
CPU DVI Out	—	1	1	—	—
GPU DVI Out	—	2	2	—	—
GPU VGA	—	1	1	—	—
VPX NVMRO	1	1	1	1	1
VPX SYSRESET, SSD Fast Purge	1	1	1	1	1
+28V DC	1	1	1	1	1