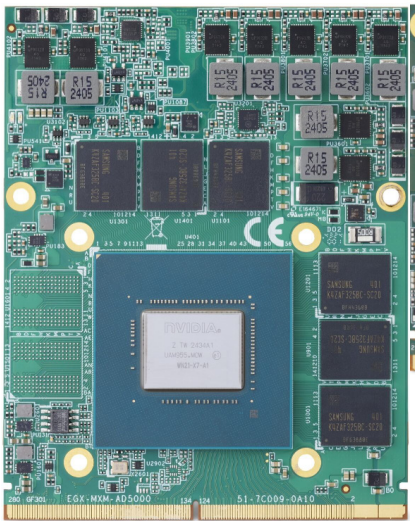
EGX-MXM-AD2000/AD3500/AD5000

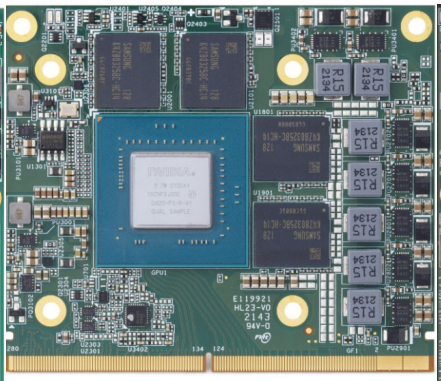
User's Manual

NVIDIA RTX 2000/ RTX3500/ RTX5000 Ada Lovelace™

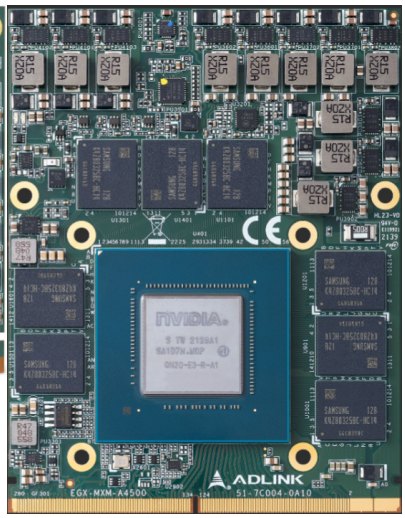
Embedded Graphics Modules



(AD3500)



(AD2000)



(AD5000)

Manual Rev.:	Rev. 1.0
Revision Date:	June 19, 2025
Part Number:	50M-7C008-1000

Leading **EDGE COMPUTING**

Preface

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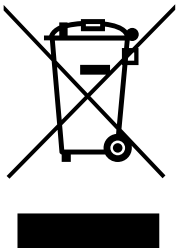
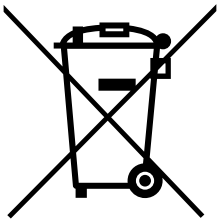
ADLINK is committed to fulfill its social responsibility to global environmental preservation through compliance with the European Union's Restriction of Hazardous Substances (RoHS) directive and Waste Electrical and Electronic Equipment (WEEE) directive. Environmental protection is a top priority for ADLINK. We have enforced measures to ensure that our products, manufacturing processes, components, and raw materials have as little impact on the environment as possible. When products are at their end of life, our customers are encouraged to dispose of them in accordance with the product disposal and/or recovery programs prescribed by their nation or company.



Battery Labels (for products with battery)



California Proposition 65 Warning

WARNING: This product can expose you to chemicals including acrylamide, arsenic, benzene, cadmium, Tris(1,3-dichloro-2-propyl)phosphate (TDCPP), 1,4-Dioxane, formaldehyde, lead, DEHP, styrene, DINP, BBP, PVC, and vinyl materials, which are known to the State of California to cause cancer, and acrylamide, benzene, cadmium, lead, mercury, phthalates, toluene, DEHP, DIDP, DnHP, DBP, BBP, PVC, and vinyl materials, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Trademarks

Product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective companies.

Revision History

Revision	Description	Date	By
1.0	Initial release	2025-06-19	AL

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1 Introduction

The EGX-MXM Ada Lovelace series brings next-generation GPU performance to embedded systems with a powerful lineup of modules based on NVIDIA's Ada Lovelace architecture. Designed for AI inference, computer vision, edge computing, and high-end graphics workloads, this series offers exceptional efficiency and compute density in a compact MXM form factor.

The product family includes three modules to meet a wide range of performance and power requirements:

- **EGX-MXM-AD2000 – Type A MXM**: A compact, power-efficient solution ideal for space-constrained systems, delivering strong performance without compromise.
- **EGX-MXM-AD3500 – Type B MXM**: A balanced module that provides enhanced compute capabilities for demanding embedded AI and graphics tasks.
- **EGX-MXM-AD5000 – Type B MXM**: The flagship model offering maximum performance for the most intensive edge workloads.

With support for the latest CUDA, TensorRT, and NVIDIA AI frameworks, the EGX-MXM Ada Lovelace series empowers developers to deploy advanced AI applications across industries such as medical imaging, industrial automation, robotics, and defense.

1.1 Features

- NVIDIA embedded graphics based on Ada Lovelace architecture
- Standard MXM 3.1 Type A/B form factor
- PCIe Gen 4 up to x16 interface
- Up to 9728 CUDA® cores, 76 RT Cores, and 304 Tensor Cores
- Up to 42.6 TFLOPS peak FP32 performance
- Up to 16GB GDDR6 memory, 256-bit
- Up to 576GB/s memory bandwidth
- Support up to 4 DP 1.4a displays, flexible power envelope from 35W to 150W TGP
- 5-year availability

1.2 Unpacking Checklist

Before unpacking, check the shipping carton for any damage. If the shipping carton and/or contents are damaged, inform your dealer immediately. Retain the shipping carton and packing materials for inspection. Obtain authorization from your dealer before returning any product to ADLINK. Ensure that the following items are included in the package.

- EGX-MXM-AD2000 embedded graphics module
- EGX-MXM-AD3500 embedded graphics module
- EGX-MXM-AD5000 embedded graphics module

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2 Specifications

2.1 Core System

Model Name	EGX-MXM-AD2000	EGX-MXM-AD3500	EGX-MXM-AD5000
Graphic Core			
Graphic Architecture	NVIDIA RTX™ 2000 ADA	NVIDIA RTX™ 3500 ADA	NVIDIA RTX™ 5000 ADA
	AD107-975 GPU	AD104-925 GPU	AD103-950 GPU
Memory	8GB GDDR6 memory,	12GB GDDR6 memory,	16GB GDDR6 memory,
	128-bit,	192-bit,	256-bit,
	Bandwidth: 256GB/s	Bandwidth: 432GB/s	Bandwidth: 576GB/s
ECC Support	Yes	Yes	Yes
GPGPU Computing			
CUDA® Cores	3,072 CUDA® Cores,	5,120 CUDA® Cores,	9,728 CUDA® Cores,
	14.5 TFLOPS Peak	23 TFLOPS Peak	42.6 TFLOPS Peak
	FP32 Performance	FP32 Performance	FP32 Performance
Tensor Cores	96	160	304
RT Cores	24	40	76
Compute API	CUDA® Toolkit 8.0 and above, CUDA® Compute version 8 and above, OpenCL™ 1.2		
Graphics API	DirectX® 12.1, OpenGL® 4.6		
Display			
Display Outputs	3x DP 1.4a	4x DP 1.4a	4x DP 1.4a
	HDMI 2.1, 4K at 120Hz or 8K at 60Hz with 10-bit color depth		
Interface	PCIe Gen4 x8	PCIe Gen4 x16	PCIe Gen4 x16
Mechanicals			
Dimensions	82 (W) x 70 (D) x 4.8 (H) mm	82 (W) x 105 (D) x 4.8 (H) mm	
Form Factor	Standard MXM 3.1 Type A	Standard MXM 3.1 Type B	
Environmental			
Operating Temperature	Standard: 0˚C – 55˚C		
	Extended Temperature: -40˚C – 85˚C optional*		
Storage Temperature	-40˚C – 85˚C		
Module Power Consumption	60W	115W	
SW Support			
OS Support	**Windows 11, 10 & Linux Drivers, 64-bit**		

For more information, please consult your ADLINK representative.

2.1.1 Software Support

- CUDA Toolkit 8.0 and higher
- CUDA Compute version 6.1 and higher
- OpenCL™ 1.2
- DirectX® 12
- OpenGL 4.6
- Vulcan 1.0

2.1.2 Graphics Options

While the EGX-MXM-AD2000 supports 3x DisplayPort by default, both the EGX-MXM-AD3500 and EGX-MXM-AD5000 support a 4xDisplayPort by default. The display options are as shown below.

Table 1: Graphics module display options

MXM port	DP_A	DP_B	DP_C	DP_D
EGX-MXM-AD2000	Link A DP	Link B DP	Link C DP/HDMI	
EGX-MXM-AD3500/EGX-MXM-AD5000	Link A DP/HDMI	Link C DP/HDMI	Link D DP	Link E DP

2.2 Thermal Policy

The GPU core clock throttles when the junction temperature (TJ) exceeds the thresholds shown below, exhibiting the listed behaviors. Thermal throttling ensures that the highest temperature on the die does not exceed the sensor temperature for prolonged periods.

The maximum operating temperature (Tcase) for the memory is 95°C. The GDDR6 memory junction temperature (TJ) is expected to be higher than Tcase. Partners must meet both the memory Tcase and Tjunction requirements through proper thermal solution design.

Parameter	**RTX5000 ADA**	**RTX3500 ADA**	**RTX2000 ADA**	**Units**
Thermal Resistance (Junction to Case, RJC)	0.018	0.023	0.048	°C/W
Thermal Resistance (Junction to PCB Board, RJB)	0.987	1.236	1.450	°C/W
GPU Maximum Operating Temperature1	89	89	89	°C
GPU Slowdown Temperature (THERM_ALERT)2	97	97	91	°C
GPU Shutdown Temperature (OVERT)3	100	100	101	°C
GPU Target Temperature	>87 (Default) <75 (Min)			°C

2.3 Certifications & Agencies

- Windows Hardware Quality Lab (WHQL) certified for Windows 10 and Windows 11
- EU Reduction of Hazardous Substances (EU-RoHS)
- Conformité Européenne (CE)
- Federal Communications Commission (FCC)

3 Functional Block Diagram

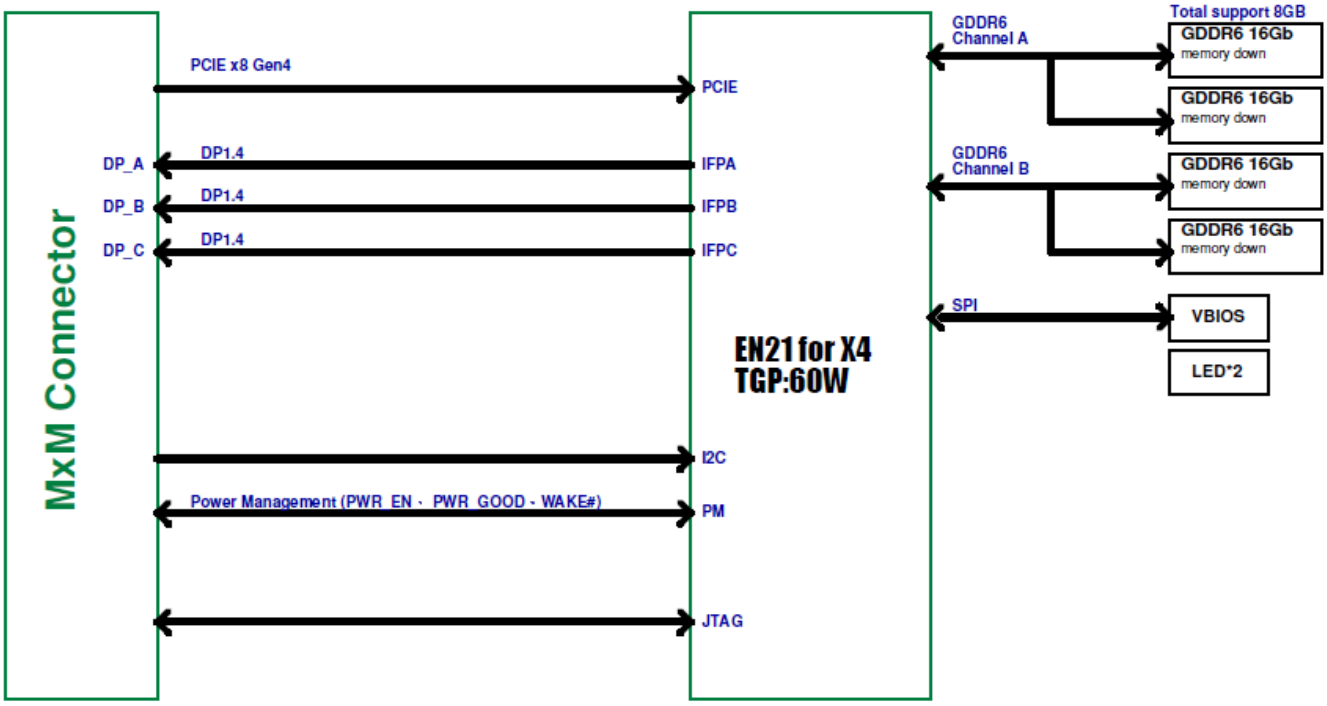

Figure 1: EGX-MXM-AD2000 functional block diagram

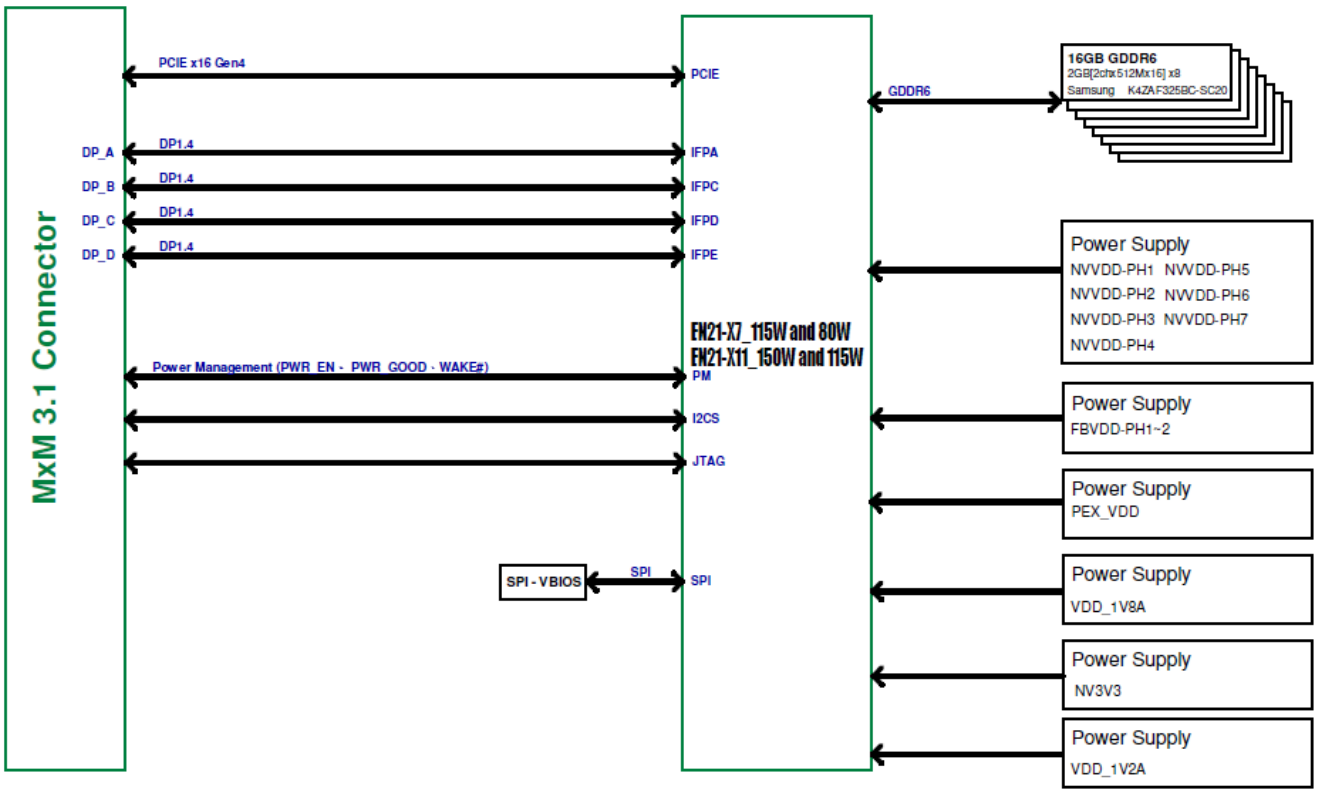

Figure 2: EGX-MXM-AD3500/AD5000 functional block diagram

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4 Mechanical Layout

NOTE:

All dimensions shown are in mm.

4.1 EGX-MXM-AD2000 Mechanical Layout

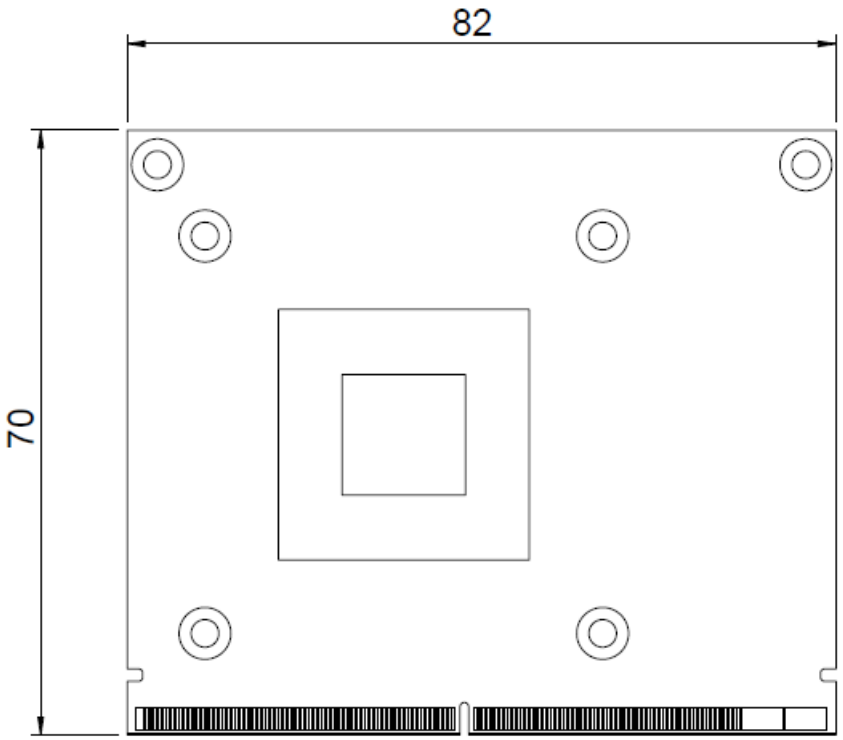

Figure 3: EGX-MXM-AD2000 mechanical dimensions

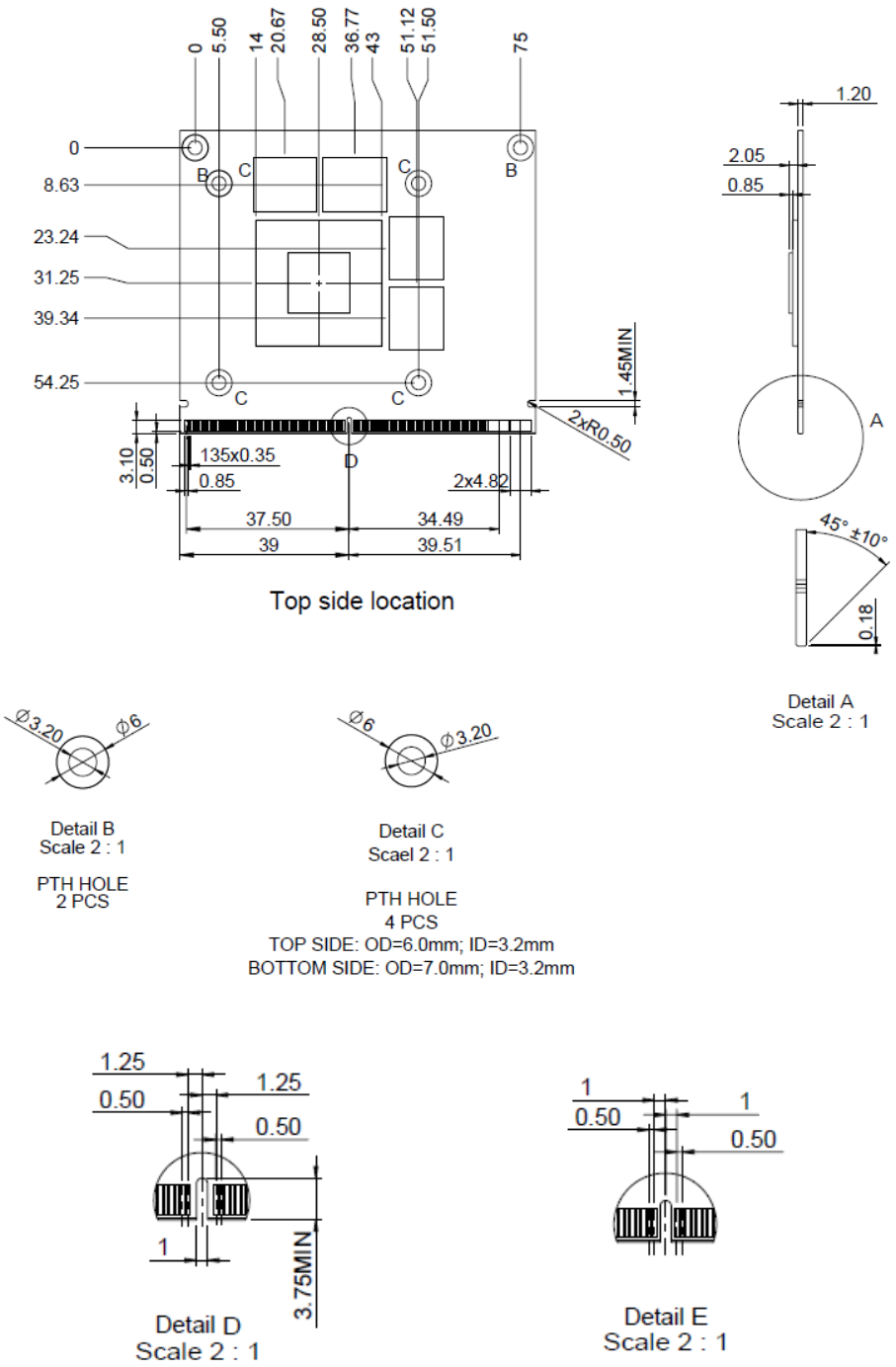

Figure 4: EGX-MXM-AD2000 top and side view

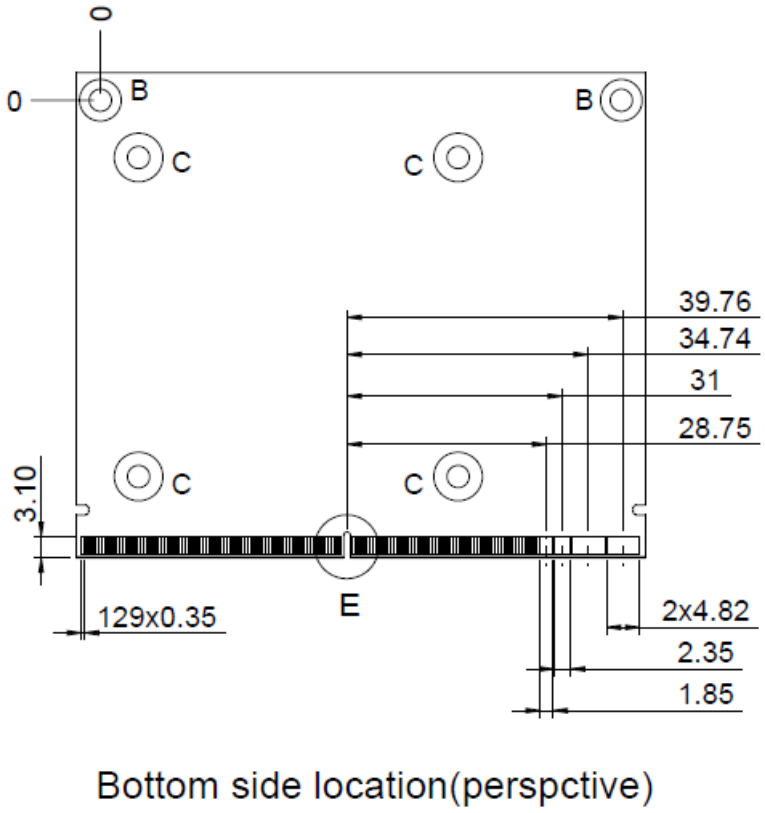

Figure 5: EGX-MXM-AD2000 bottom view

4.2 EGX-MXM-AD3500 Mechanical Layout

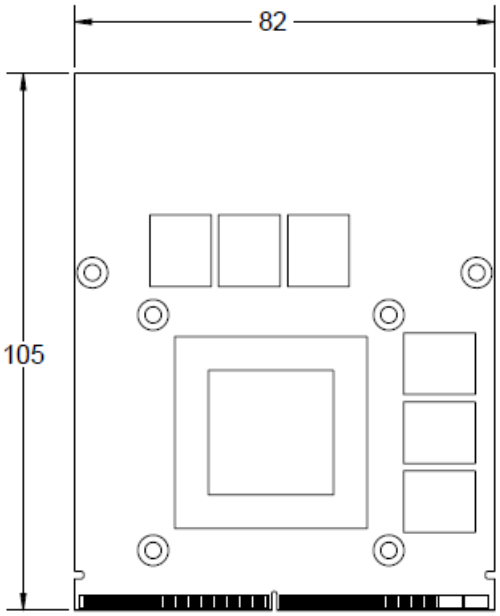

Figure 6: EGX-MXM-AD3500 mechanical dimensions

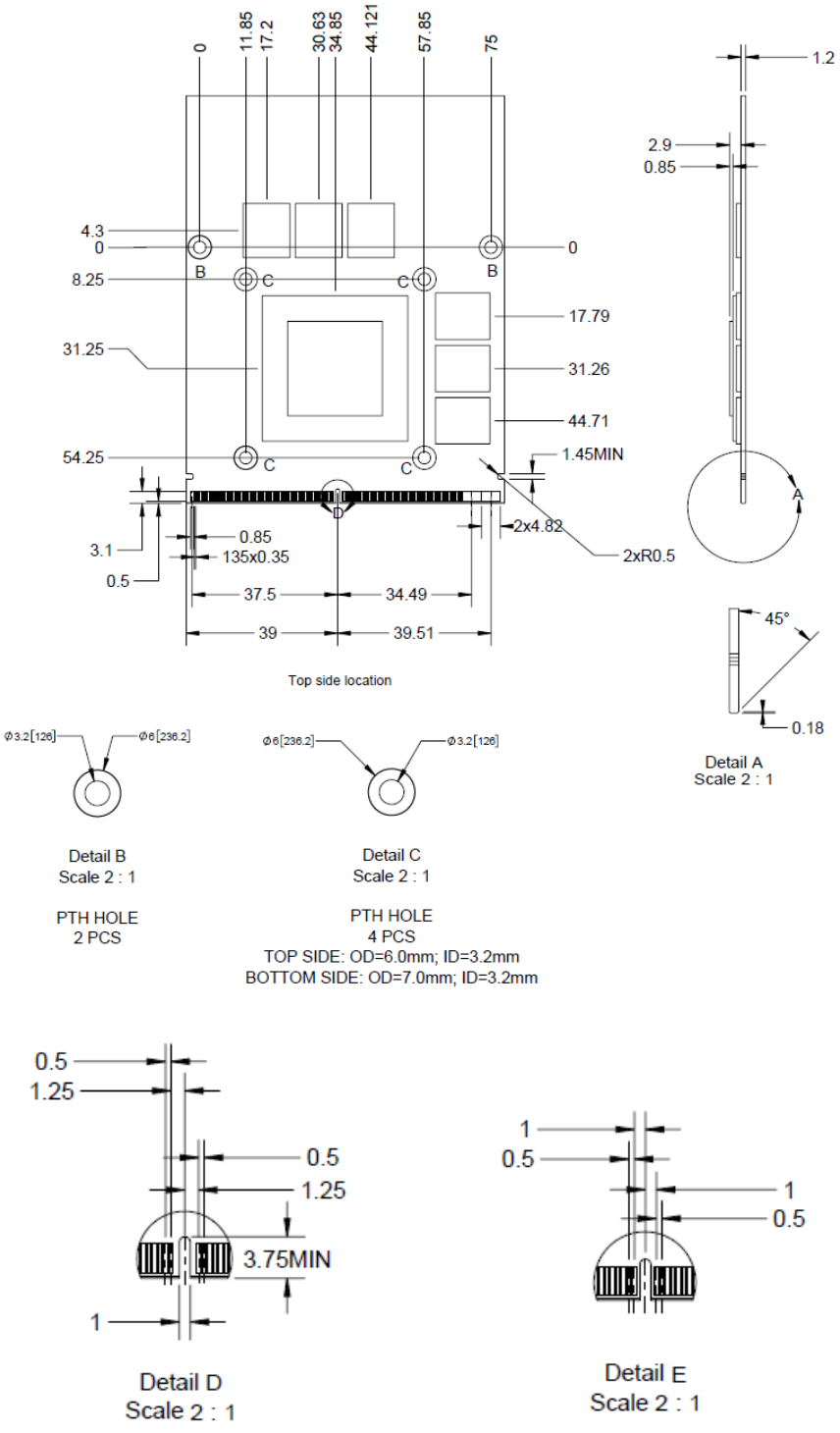

Figure 7: EGX-MXM-AD3500 top and side view

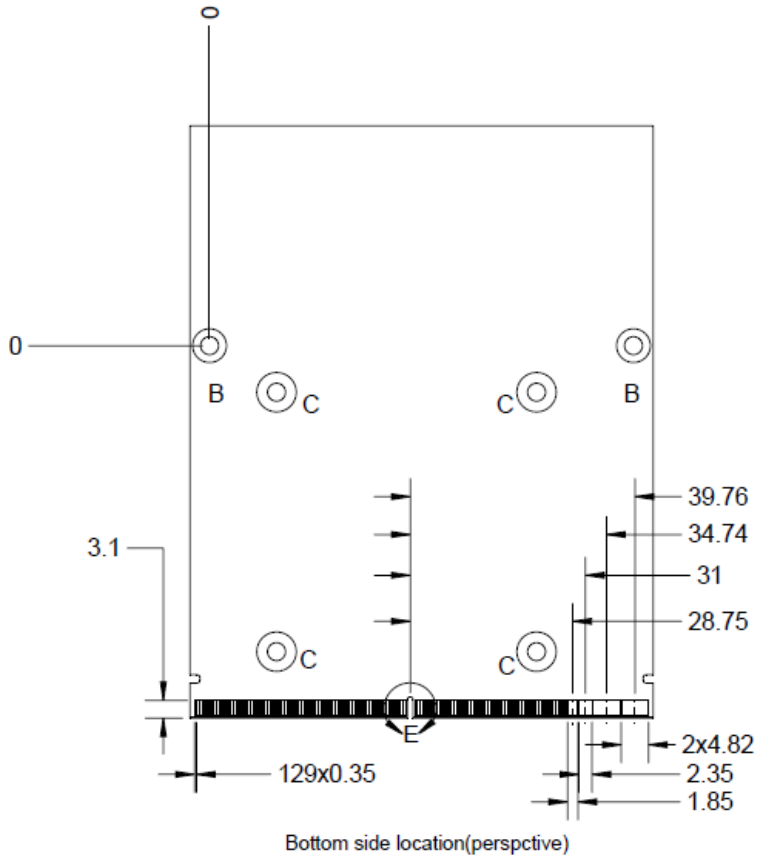

Figure 8: EGX-MXM-AD3500 bottom view

4.3 EGX-MXM-AD5000 Mechanical Layout

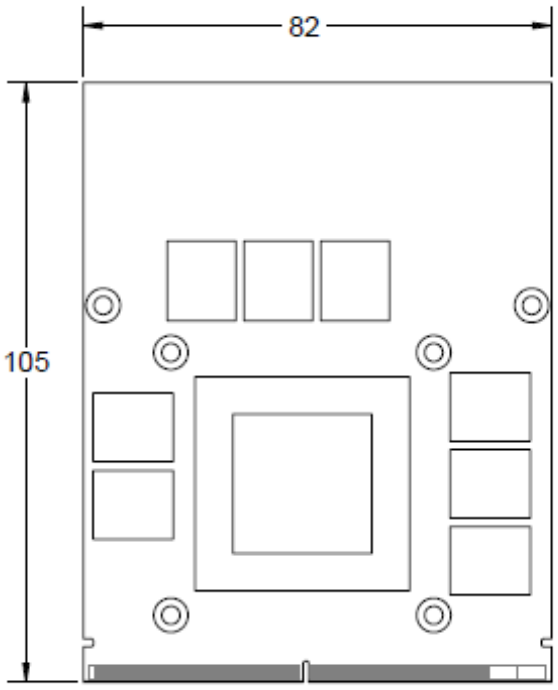

Figure 9: EGX-MXM-AD5000 mechanical dimensions

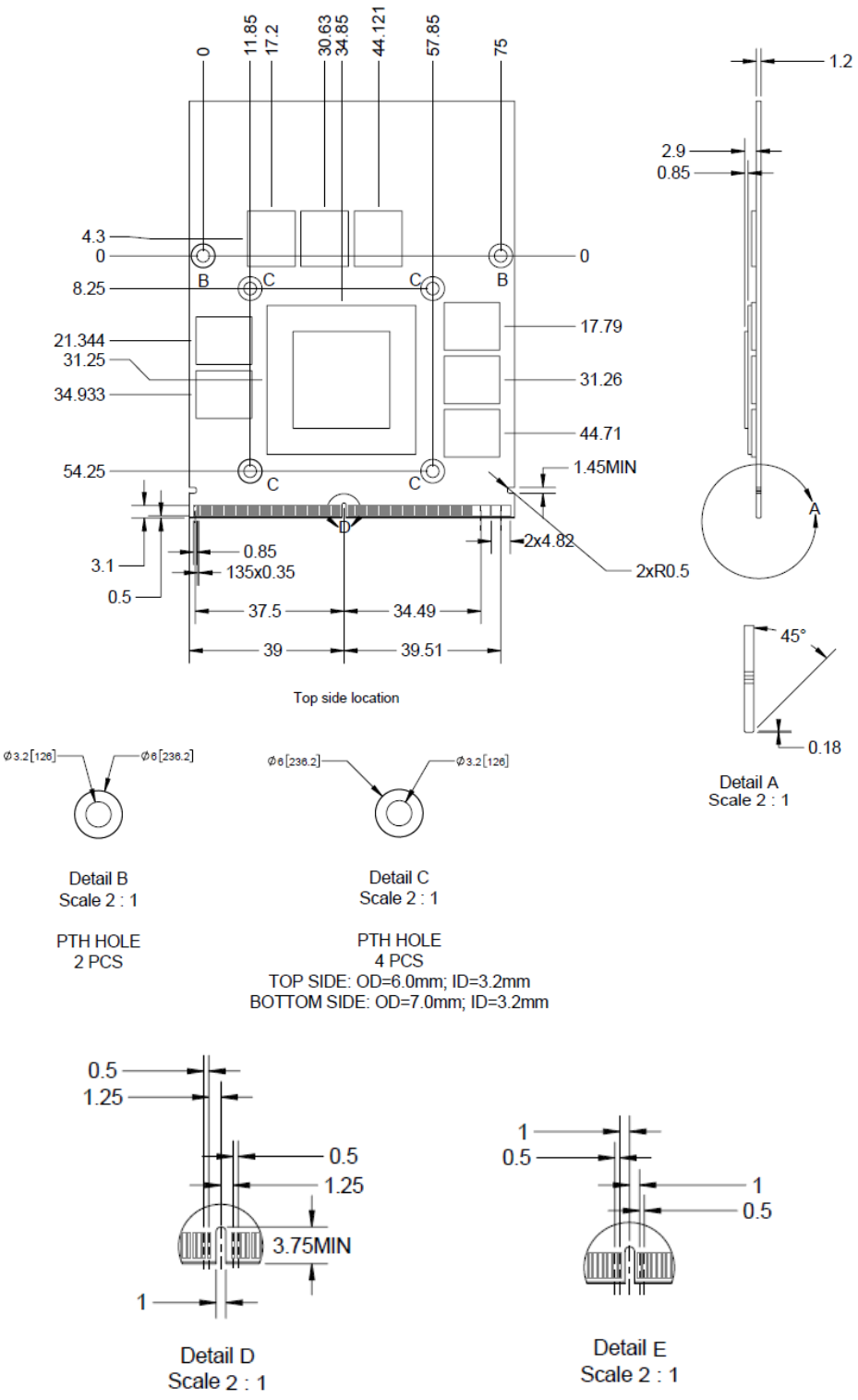

Figure 10: EGX-MXM-AD5000 top and side view

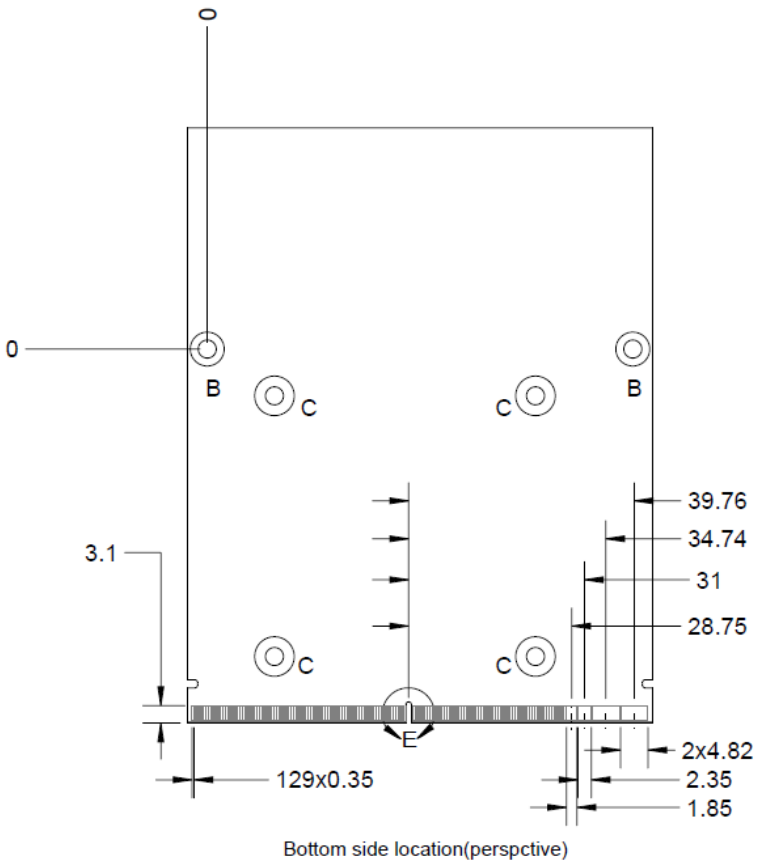

Figure 11: EGX-MXM-AD5000 bottom view

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5 Connectors and Jumpers

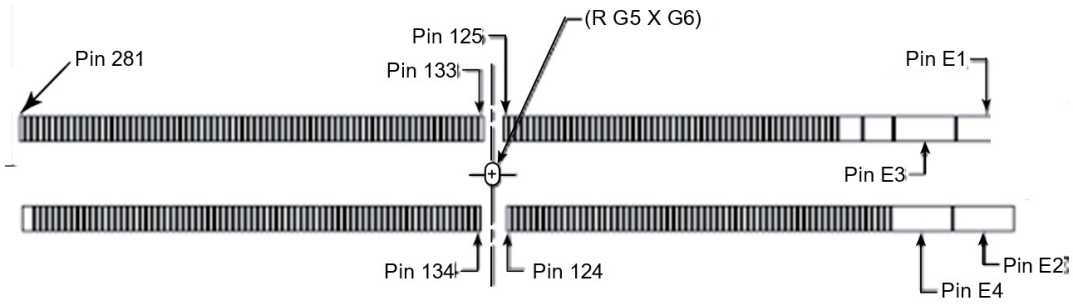


Figure 12: MXM connector

5.1 MXM Connector Pin Definitions

Primary Side (bottom side)				Secondary Side (top side)			
Pin	**Signal**	**AD5000/3500**	**AD2000**	**Pin**	**Signal**	**AD5000/3500**	**AD2000**
E1	PWR_SRC	12~20V from system	7~20V from system	E2	PWR_SRC	12~20V from system	7~20V from system
E3	GND	GND	GND	E4	GND	GND	GND
1	5V	5V from system	5V from system	2	PRSNT_R#	GND	GND
3	5V	5V from system	5V from system	4	WAKE#	NA	NA
5	5V	5V from system	5V from system	6	PWR_GOOD	Pull high 3.3v to 10k ohm from system	Pull high 3.3v to 10k ohm from system
7	5V	5V from system	5V from system	8	PWR_EN	3.3V from system	3.3V from system
9	5V	5V from system	5V from system	10	27MHZ_REF	NA	NA
11	GND	GND	GND	12	GND	GND	GND
13	GND	GND	GND	14	LVDS_U_HDP	NA	NA
15	GND	GND	GND	16	JTAG_TESTEN	NA	NA
17	GND	GND	GND	18	PWR_LEVEL	Pull high 3.3v to 100k ohm	Pull high 3.3v to 100k ohm
19	PEX_STD_SW#	NA	NA	20	TH_OVERT#	Pull high 3.3v to 100k ohm	Pull high 3.3v to 100k ohm
21	VGA_DISABLE#	NA	NA	22	TH_ALERT#	Pull high 3.3v to 100k ohm	Pull high 3.3v to 100k ohm
23	PNL_PWR_EN	NA	NA	24	TH_PWM	NA	NA
25	PNL_BL_EN	NA	NA	26	GPIO0	NA	NA
27	PNL_BL_PWM	NA	NA	28	GPIO1	NA	NA
29	HDMI_CEC	NA	NA	30	GPIO2	NA	NA
31	LVDS_L_HDP	NA	NA	32	SMB_DAT	Pull high 3.3v to 100k ohm	Pull high 3.3v to 100k ohm
33	LVDS_DDC_DAT	NA	NA	34	SMB_CLK	Pull high 3.3v to 100k ohm	Pull high 3.3v to 100k ohm
35	LVDS_DDC_CLK	NA	NA	36	GND	GND	GND
37	GND	GND	GND	38	OEM0	NA	NA
39	OEM1	NA	NA	40	OEM2	NA	NA
41	OEM3	NA	NA	42	OEM4	NA	NA
43	OEM5	NA	NA	44	OEM6	NA	NA
45	OEM7	NA	NA	46	GND	GND	GND

47	GND	GND	GND	48	PEX_TX15#	DC caps 0.22uf from system	NA
49	PEX_RX15#	DC caps 0.22uf from system	NA	50	PEX_TX15	DC caps 0.22uf from system	NA
51	PEX_RX15	DC caps 0.22uf from system	NA	52	GND	GND	GND
53	GND	GND	GND	54	PEX_TX14#	DC caps 0.22uf from system	NA
55	PEX_RX14#	DC caps 0.22uf from system	NA	56	PEX_TX14	DC caps 0.22uf from system	NA
57	PEX_RX14	DC caps 0.22uf from system	NA	58	GND	GND	GND
59	GND	GND	GND	60	PEX_TX13#	DC caps 0.22uf from system	NA
61	PEX_RX13#	DC caps 0.22uf from system	NA	62	PEX_TX13	DC caps 0.22uf from system	NA
63	PEX_RX13	DC caps 0.22uf from system	NA	64	GND	GND	GND
65	GND	GND	GND	66	PEX_TX12#	DC caps 0.22uf from system	NA
67	PEX_RX12#	DC caps 0.22uf from system	NA	68	PEX_TX12	DC caps 0.22uf from system	NA
69	PEX_RX12	DC caps 0.22uf from system	NA	70	GND	GND	GND
71	GND	GND	GND	72	PEX_TX11#	DC caps 0.22uf from system	NA
73	PEX_RX11#	DC caps 0.22uf from system	NA	74	PEX_TX11	DC caps 0.22uf from system	NA
75	PEX_RX11	DC caps 0.22uf from system	NA	76	GND	GND	GND
77	GND	GND	GND	78	PEX_TX10#	DC caps 0.22uf from system	NA
79	PEX_RX10#	DC caps 0.22uf from system	NA	80	PEX_TX10	DC caps 0.22uf from system	NA
81	PEX_RX10	DC caps 0.22uf from system	NA	82	GND	GND	GND
83	GND	GND	GND	84	PEX_TX9#	DC caps 0.22uf from system	NA
85	PEX_RX9#	DC caps 0.22uf from system	NA	86	PEX_TX9	DC caps 0.22uf from system	NA
87	PEX_RX9	DC caps 0.22uf from system	NA	88	GND	GND	GND
89	GND	GND	GND	90	PEX_TX8#	DC caps 0.22uf from system	NA
91	PEX_RX8#	DC caps 0.22uf from system	NA	92	PEX_TX8	DC caps 0.22uf from system	NA
93	PEX_RX8	DC caps 0.22uf from system	NA	94	GND	GND	GND
95	GND	GND	GND	96	PEX_TX7#	DC caps 0.22uf from system	DC caps 0.22uf from system
97	PEX_RX7#	DC caps 0.22uf from system	DC caps 0.22uf from system	98	PEX_TX7	DC caps 0.22uf from system	DC caps 0.22uf from system
99	PEX_RX7	DC caps 0.22uf from system	DC caps 0.22uf from system	100	GND	GND	GND
101	GND	GND	GND	102	PEX_TX6#	DC caps 0.22uf from system	DC caps 0.22uf from system
103	PEX_RX6#	DC caps 0.22uf from system	DC caps 0.22uf from system	104	PEX_TX6	DC caps 0.22uf from system	DC caps 0.22uf from system
105	PEX_RX6	DC caps 0.22uf from system	DC caps 0.22uf from system	106	GND	GND	GND
107	GND	GND	GND	108	PEX_TX5#	DC caps 0.22uf from system	DC caps 0.22uf from system
109	PEX_RX5#	DC caps 0.22uf from system	DC caps 0.22uf from system	110	PEX_TX5	DC caps 0.22uf from system	DC caps 0.22uf from system
111	PEX_RX5	DC caps 0.22uf from system	DC caps 0.22uf from system	112	GND	GND	GND
113	GND	GND	GND	114	PEX_TX4#	DC caps 0.22uf	DC caps 0.22uf

						from system	from system
115	PEX_RX4#	DC caps 0.22uf from system	DC caps 0.22uf from system	116	PEX_TX4	DC caps 0.22uf from system	DC caps 0.22uf from system
117	PEX_RX4	DC caps 0.22uf from system	DC caps 0.22uf from system	118	GND	GND	GND
119	GND	GND	GND	120	PEX_TX3#	DC caps 0.22uf from system	DC caps 0.22uf from system
121	PEX_RX3#	DC caps 0.22uf from system	DC caps 0.22uf from system	122	PEX_TX3	DC caps 0.22uf from system	DC caps 0.22uf from system
123	PEX_RX3	DC caps 0.22uf from system	DC caps 0.22uf from system	124	GND	GND	GND
125	GND	GND	GND	126	KEY	NA	NA
127	KEY	NA	NA	128	KEY	NA	NA
129	KEY	NA	NA	130	KEY	NA	NA
131	KEY	NA	NA	132	KEY	NA	NA
133	GND	GND	GND	134	GND	GND	GND
135	PEX_RX2#	DC caps 0.22uf from system	DC caps 0.22uf from system	136	PEX_TX2#	DC caps 0.22uf from system	DC caps 0.22uf from system
137	PEX_RX2	DC caps 0.22uf from system	DC caps 0.22uf from system	138	PEX_TX2	DC caps 0.22uf from system	DC caps 0.22uf from system
139	GND	GND	GND	140	GND	GND	GND
141	PEX_RX1#	DC caps 0.22uf from system	DC caps 0.22uf from system	142	PEX_TX1#	DC caps 0.22uf from system	DC caps 0.22uf from system
143	PEX_RX1	DC caps 0.22uf from system	DC caps 0.22uf from system	144	PEX_TX1	DC caps 0.22uf from system	DC caps 0.22uf from system
145	GND	GND	GND	146	GND	GND	GND
147	PEX_RX0#	DC caps 0.22uf from system	DC caps 0.22uf from system	148	PEX_TX0#	DC caps 0.22uf from system	DC caps 0.22uf from system
149	PEX_RX0	DC caps 0.22uf from system	DC caps 0.22uf from system	150	PEX_TX0	DC caps 0.22uf from system	DC caps 0.22uf from system
151	GND	GND	GND	152	GND	GND	GND
153	PEX_REFCLK#	PCI Express reference clock 100Mhz from system	PCI Express reference clock 100Mhz from system	154	PEX_CLK_REQ#	GPO low active	GPO low active
155	PEX_REFCLK	PCI Express reference clock 100Mhz from system	PCI Express reference clock 100Mhz from system	156	PEX_RST#	3.3V from system	3.3V from system
157	GND	GND	GND	158	VGA_DDC_DAT	NA	NA
159	JTAG_TDO	NA	NA	160	VGA_DDC_CLK	NA	NA
161	JTAG_TDI	NA	NA	162	VGA_VSYNC	NA	NA
163	JTAG_TCLK	NA	NA	164	VGA_HSYNC	NA	NA
165	JTAG_TMS	NA	NA	166	GND	GND	GND
167	JTAG_TRST	NA	NA	168	VGA_RED	NA	NA
169	LVDS_UCLK#	NA	NA	170	VGA_GREEN	NA	NA
171	LVDS_UCLK	NA	NA	172	VGA_BLUE	NA	NA
173	GND	GND	GND	174	GND	GND	GND
175	LVDS_UTX3#	NA	NA	176	LVDS_LCLK#	NA	NA
177	LVDS_UTX3	NA	NA	178	LVDS_LCLK	NA	NA
179	GND	GND	GND	180	GND	GND	GND
181	LVDS_UTX2#	NA	NA	182	LVDS_LTX3#	NA	NA
183	LVDS_UTX2	NA	NA	184	LVDS_LTX3	NA	NA
185	GND	GND	GND	186	GND	GND	GND
187	LVDS_UTX1#	NA	NA	188	LVDS_LTX2#	NA	NA
189	LVDS_UTX1	NA	NA	190	LVDS_LTX2	NA	NA
191	GND	GND	GND	192	GND	GND	GND

193	LVDS_UTX0#	NA	NA	194	LVDS_LTX1#	NA	NA
195	LVDS_UTX0	NA	NA	196	LVDS_LTX1	NA	NA
197	GND	GND	GND	198	GND	GND	GND
199	DP_C_L0#	IFPD	IFPC	200	LVDS_LTX0#	NA	NA
201	DP_C_L0	IFPD	IFPC	202	LVDS_LTX0	NA	NA
203	GND	GND	GND	204	GND	GND	GND
205	DP_C_L1#	IFPD	IFPC	206	DP_D_L0#	IFPE	NA
207	DP_C_L1	IFPD	IFPC	208	DP_D_L0	IFPE	NA
209	GND	GND	GND	210	GND	GND	GND
211	DP_C_L2#	IFPD	IFPC	212	DP_D_L1#	IFPE	NA
213	DP_C_L2	IFPD	IFPC	214	DP_D_L1	IFPE	NA
215	GND	GND	GND	216	GND	GND	GND
217	DP_C_L3#	IFPD	IFPC	218	DP_D_L2#	IFPE	NA
219	DP_C_L3	IFPD	IFPC	220	DP_D_L2	IFPE	NA
221	GND	GND	GND	222	GND	GND	GND
223	DP_C_AUX#	IFPD	IFPC	224	DP_D_L3#	IFPE	NA
225	DP_C_AUX	IFPD	IFPC	226	DP_D_L3	IFPE	NA
227	RSVD	NA	NA	228	GND	GND	GND
229	RSVD	NA	NA	230	DP_D_AUX#	IFPE	NA
231	RSVD	NA	NA	232	DP_D_AUX	IFPE	NA
233	RSVD	NA	NA	234	DP_C_HPD	IFPD	IFPC
235	RSVD	NA	NA	236	DP_D_HPD	IFPE	NA
237	RSVD	NA	NA	238	RSVD	NA	NA
239	RSVD	NA	NA	240	3V3	3.3V from system	3.3V from system
241	RSVD	NA	NA	242	3V3	3.3V from system	3.3V from system
243	RSVD	NA	NA	244	GND	GND	GND
245	RSVD	NA	NA	246	DP_B_L0#	IFPC	IFPB
247	RSVD	NA	NA	248	DP_B_L0	IFPC	IFPB
249	RSVD	NA	NA	250	GND	GND	GND
251	GND	GND	GND	252	DP_B_L1#	IFPC	IFPB
253	DP_A_L0#	IFPA	IFPA	254	DP_B_L1	IFPC	IFPB
255	DP_A_L0	IFPA	IFPA	256	GND	GND	GND
257	GND	GND	GND	258	DP_B_L2#	IFPC	IFPB
259	DP_A_L1#	IFPA	IFPA	260	DP_B_L2	IFPC	IFPB
261	DP_A_L1	IFPA	IFPA	262	GND	GND	GND
263	GND	GND	GND	264	DP_B_L3#	IFPC	IFPB
265	DP_A_L2#	IFPA	IFPA	266	DP_B_L3	IFPC	IFPB
267	DP_A_L2	IFPA	IFPA	268	GND	GND	GND
269	GND	GND	GND	270	DP_B_AUX#	IFPC	IFPB
271	DP_A_L3#	IFPA	IFPA	272	DP_B_AUX	IFPC	IFPB
273	DP_A_L3	IFPA	IFPA	274	DP_B_HPD	IFPC	IFPB
275	GND	GND	GND	276	DP_A_HPD	IFPA	IFPA
277	DP_A_AUX#	IFPA	IFPA	278	3V3	3.3V from system	3.3V from system
279	DP_A_AUX	IFPA	IFPA	280	3V3	3.3V from system	3.3V from system
281	PRSNT_L#	GND	GND				

6 System Requirements

6.1 Power Management and Reset

6.1.1 Power Sequencing

For initial power on, or to Resume from S3 and S4, this sequence must be followed.

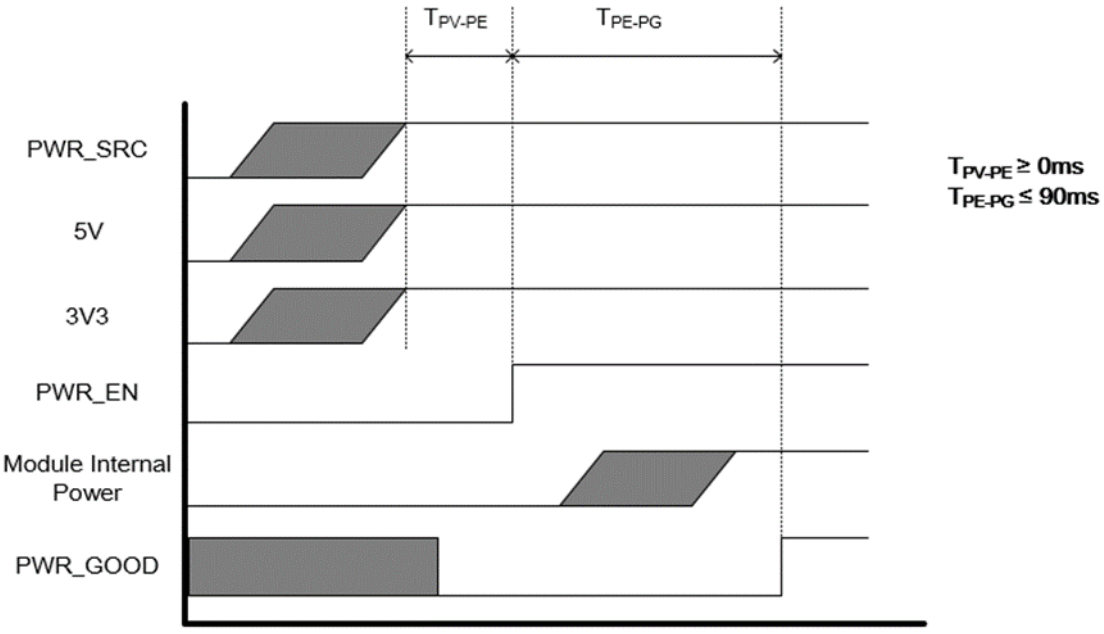


Figure 13: Power sequencing

6.1.2 Module Power Up and Down

Issuing the PWR_EN signal powers the MXM module down, and the system designer can decide whether to keep the module input power when the MXM module is powered down.

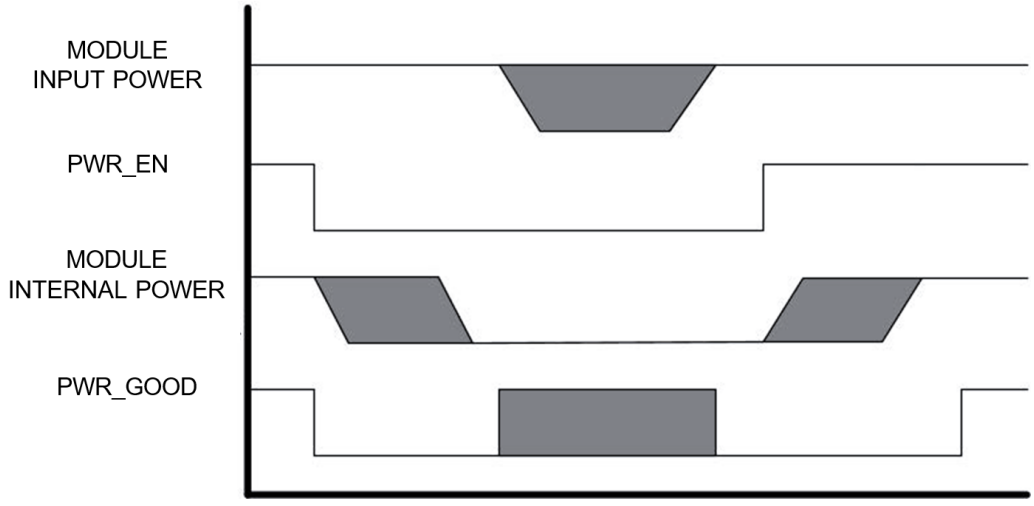


Figure 14: Modular power up and down

6.1.3 Reset Requirements

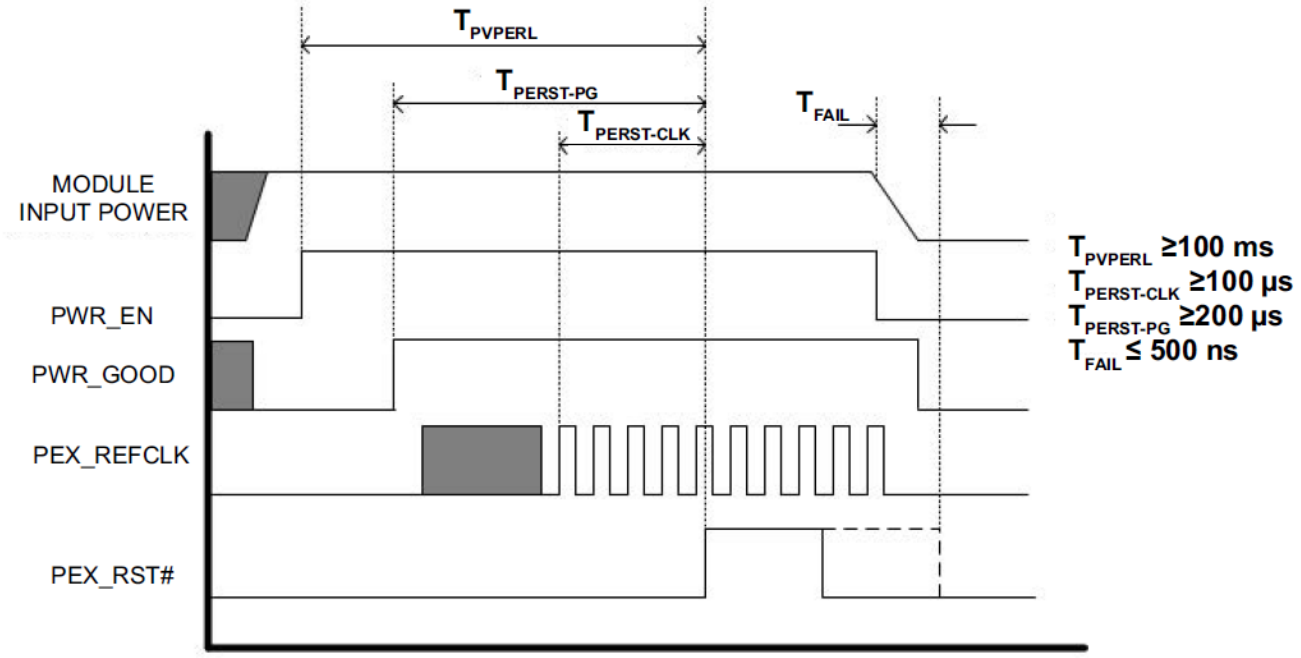


Figure 15: Reset requirements

6.2 Display Interface Configurations

6.2.1 Dual Mode DisplayPort Implementation

The EGX-MXM-AD2000/AD3500/AD5000 supports four dual mode DisplayPorts by default. HDMI can be supported via dongle. The system requires a switch circuit to determine whether the AUX or DDC signal is output from the MXM module, and AC coupling capacitors should be placed on the system board.

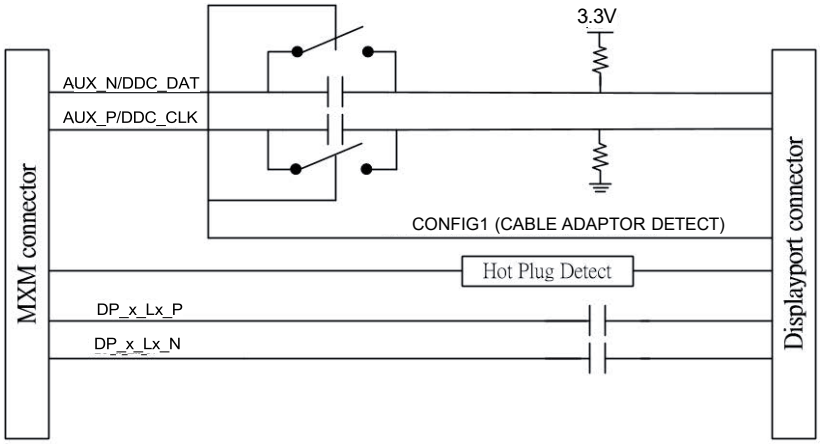


Figure 16: Dual mode DisplayPort implementation

6.2.2 HDMI on DisplayPort Interface

HDMI connectors can both be implemented through the DisplayPort interface. To support HDMI display from MXM, the HDMI port needs to be routed based on the Circuits required on the system board are as shown. 499Ω with 1% pulldown resistors to the ground on the DP lanes must place on the HDMI connector side of the AC coupling, gated by a MOSFET to limit leakage.

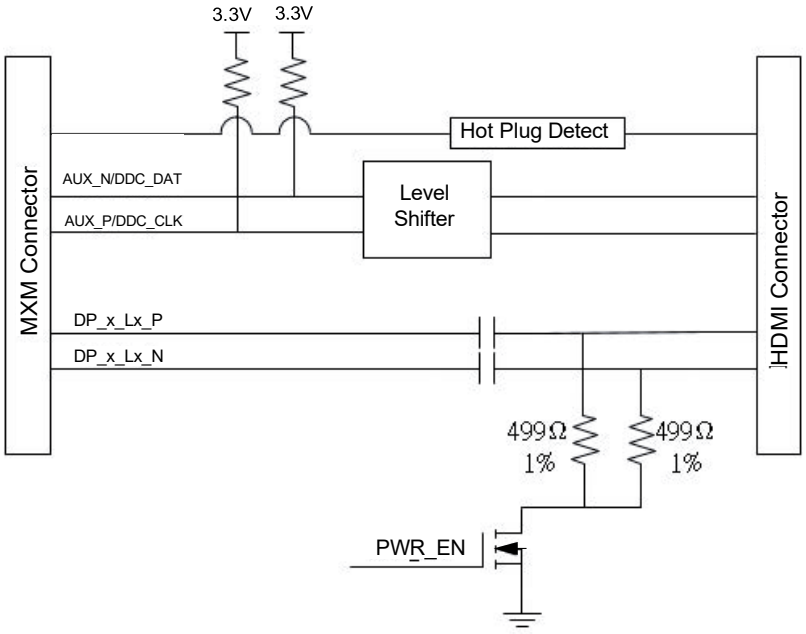


Figure 17: HDMI on DisplayPort interface

For resolutions higher than 1080p, contact an ADLINK FAE for customized service, or use an active IC in the circuit design.

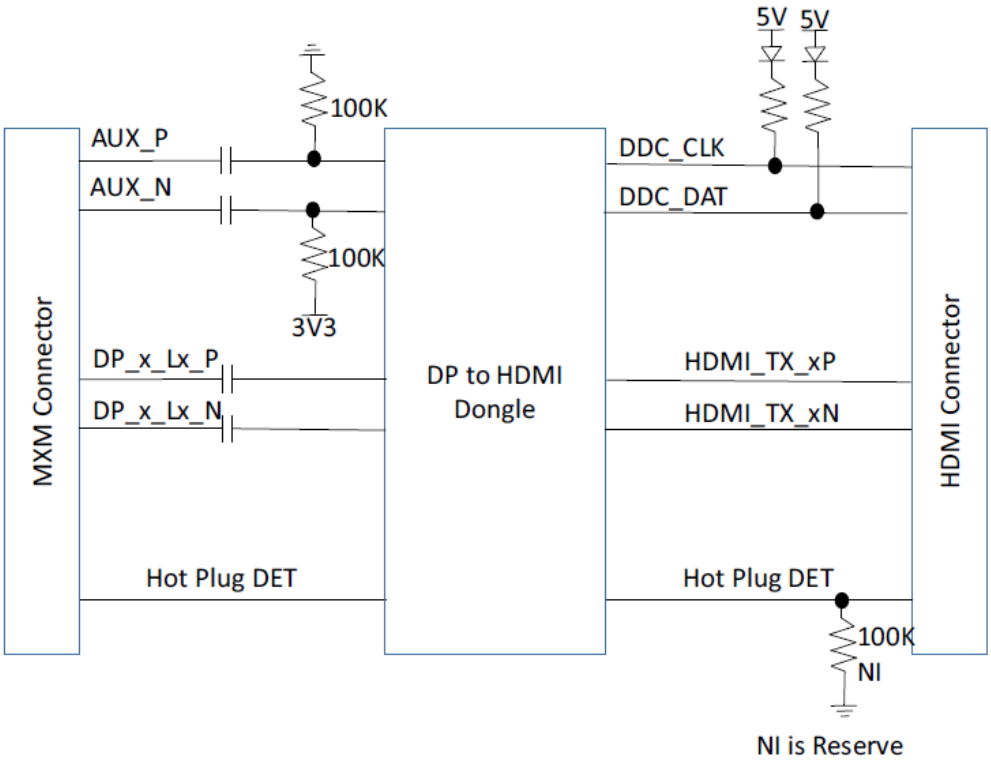


Figure 18: HDMI on DisplayPort interface (For resolutions higher than 1080p)

6.3 Driver Installation

Drivers can be downloaded through the following links:

Ada 2000 Driver: https://www.adlinktech.com/Products/DownloadSoftwareDriver?lang=zh-hant&pdNo=2173&MainCategory=embedded-graphics-solutions&kind=DR

Ada 3500 Driver: https://www.adlinktech.com/Products/DownloadSoftwareDriver?lang=zh-hant&pdNo=2243&MainCategory=embedded-graphics-solutions&kind=DR

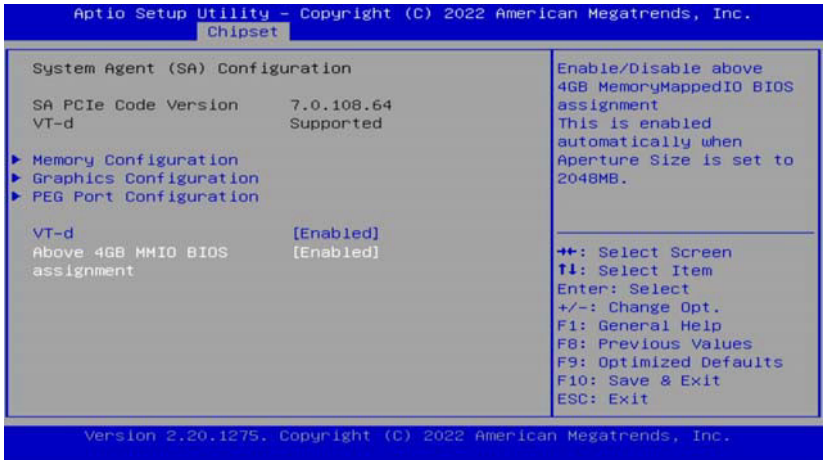
Ada 5000 Driver: https://www.adlinktech.com/Products/DownloadSoftwareDriver?lang=en&pdNo=2244&MainCategory=embedded-graphics-solutions&kind=DR

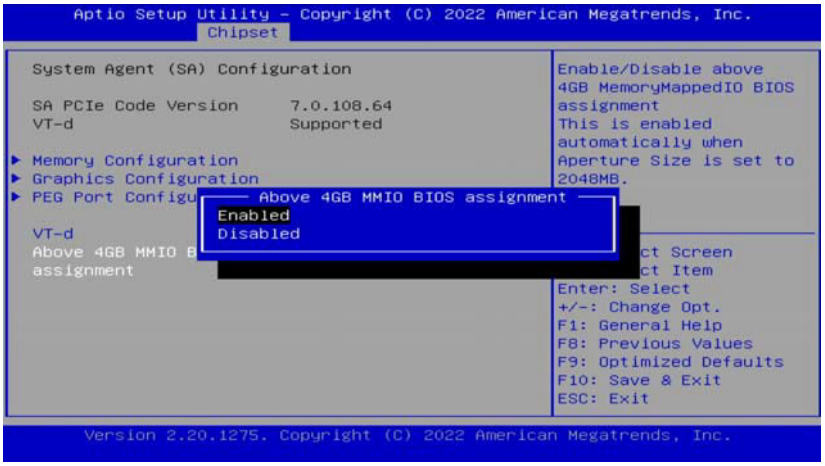
6.4 System BIOS Settings

The system BIOS must meet the following criteria:

- SBIOS must support the "Above 4G decoding" feature to support a resizable BAR1 size.
- SBIOS must enable "Above 4G decoding" as the default configuration.

The following is a sample BIOS menu setting for reference. The actual menu setting can vary depending on the specific SBIOS design.





Safety Instructions

Read and follow all instructions marked on the product and in the documentation before you operate your system. Retain all safety and operating instructions for future use.

- Please read these safety instructions carefully.
- Please keep this User‘s Manual for later reference.
- Read the specifications section of this manual for detailed information on the operating environment of this equipment.
- When installing/mounting or uninstalling/removing equipment, turn off the power and unplug any power cords/cables.
- To avoid electrical shock and/or damage to equipment:
  - Keep equipment away from water or liquid sources.
  - Keep equipment away from high heat or high humidity.
  - Keep equipment properly ventilated (do not block or cover ventilation openings).
  - Make sure to use recommended voltage and power source settings.
  - Always install and operate equipment near an easily accessible electrical socket-outlet.
  - Secure the power cord (do not place any object on/over the power cord).
  - Only install/attach and operate equipment on stable surfaces and/or recommended mountings.
  - If the equipment will not be used for long periods of time, turn off and unplug the equipment from its power source.
- Never attempt to fix the equipment. Equipment should only be serviced by qualified personnel.

Getting Services

Ask an Expert: https://www.adlinktech.com/en/Askanexpert

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