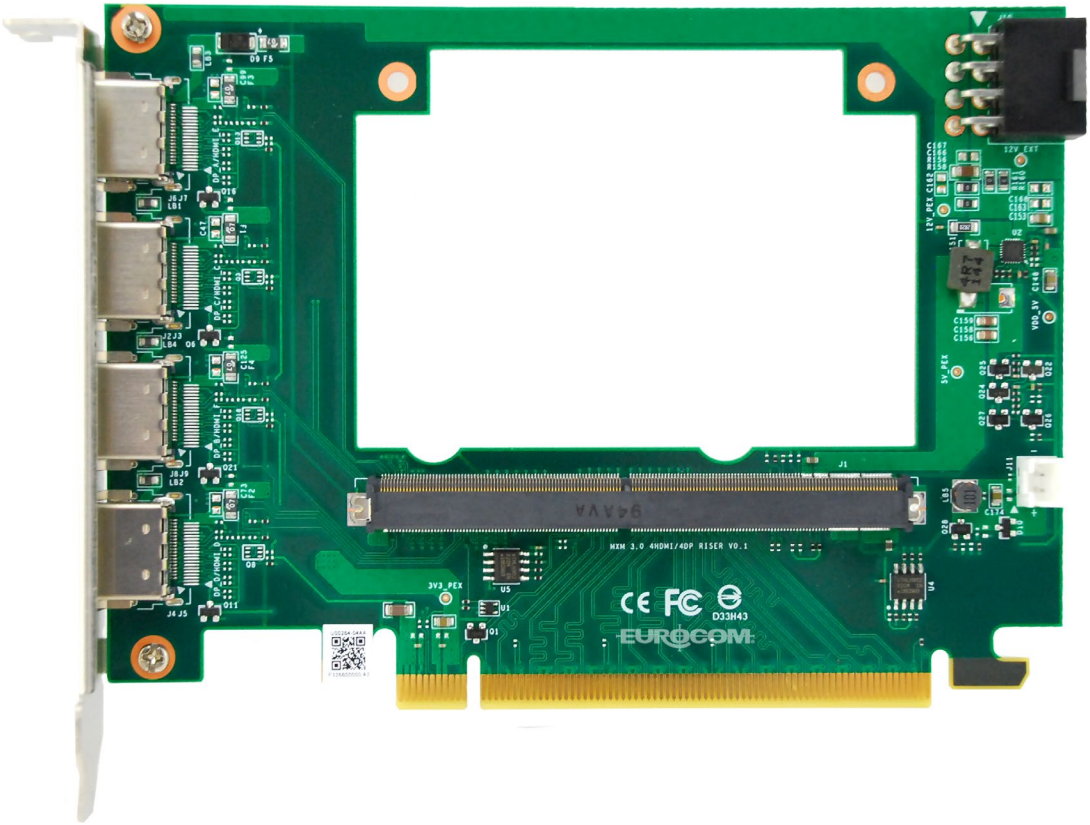
4x HDMI MXM3 to PCIe Adapter

Datasheet

Model number: MXM30RISER-4H



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1. Feature

Part No.	*MXM30RISER-4H*
Basic Specifications	
Bus Type	PCI-Express X16 3.0/2.0
Form Factor	ATX
Support MXM card type	MXM 3.1 Type A & Type B
Display Outputs	HDMI x4
Fan Connector Type	2Pin (Pitch 2.5)
External Power	Yes
Power Connector	8-Pin
Maximum Power Support	225W
Operating Temperature	0˚C~50˚C
Board Dimensions	150x110mm

2. Functional Overview

2.1 Display/Audio Support by Port

HDMI_A (Link-E)		HDMI_C (Link-C)		HDMI_B (Link-F)		HDMI_D (Link-D)	
Display	Audio	Display	Audio	Display	Audio	Display	Audio
HDMI 2.0*	V	HDMI 2.0*	V	HDMI 2.0*	V	HDMI 2.0*	V

*Up to HDMI2.0, depends on MXM module installed

2.2 Compatibility Test with MXM VGA board

NVIDIA MXM board		
GPU CHIP	BUS Type	Compatibility
NVIDIA GTX 1660 SUPER / TU116-300-A1	MXM TYPE B	PASS
NVIDIA GTX 1650 / TU117-300-A1	MXM TYPE A	PASS
NVIDIA GTX 1050 Ti / GP107-400-A1	MXM TYPE A	PASS

AMD MXM board		
GPU CHIP	BUS Type	Compatibility
AMD Radeon E9550 (4*DP)	MXM TYPE B	PASS
AMD Radeon RX560 Series (4*HDMI)	MXM TYPE A	PASS

3. MXM Socket PIN Assignment and Description

Pin #	Pin Name	Pin Description
E1	PWR_SRC_E1	12V
E3	GND_E3	GND
1	5V_1	5V +/- 5%
11	GND_11	GND
19	REX_STD_SW	REX_STD_SW
21	VGA_DISABLE	No Connect
23	PNL_PWR_EN_23	No Connect
25	PNL_BL_EN_25	No Connect
27	PNL_PWM_27	No Connect
29	HDMI_CEC_29	SNN_HDMI_CEC_C
31	DVI_HPD_31	No Connect
33	LVDS_DDC_DAT_33	MXM Config Flash Rom For NV
35	LVDS_DDC_CLK_35	MXM Config Flash Rom For NV
37	GND_37	GND
39	0EM1_39	No Connect
41	0EM3_41	No Connect
43	0EM5_43	No Connect
45	0EM7_45	No Connect
47	GND_47	GND
49	PEX_RX15#_49	PCI Express® input to the Root Complex. DC blocking caps must be placed on the system board.
51	PEX_RX15_51	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
53	GND_53	GND
55	PEX_RX14#_55	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
57	PEX_RX14_57	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
59	GND_59	GND
61	PEX_RX13#_61	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.

Pin #	Pin Name	Pin Description
63	PEX_RX13_63	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
65	GND_65	GND
67	PEX_RX12#_67	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
69	PEX_RX12_69	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
71	GND_71	GND
73	PEX_RX11#_73	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
75	PEX_RX11_75	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
77	GND_77	GND
79	PEX_RX10#_79	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
81	PEX_RX10_81	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
83	GND_83	GND
85	PEX_RX9#_85	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
87	PEX_RX9_87	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
89	GND_89	GND
91	PEX_RX8#_91	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
93	PEX_RX8_93	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
95	GND_95	GND
97	PEX_RX7#_97	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
99	PEX_RX7_99	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
101	GND_101	GND
103	PEX_RX6#_103	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.

Pin #	Pin Name	Pin Description
105	PEX_RX6_105	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
107	GND_107	GND
109	PEX_RX5#_109	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
111	PEX_RX5_111	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
113	GND_113	GND
115	PEX_RX4#_115	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
117	PEX_RX4_117	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
119	GND_119	GND
121	PEX_RX3#_121	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
123	PEX_RX3_123	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
125	GND_125	GND
133	GND_133	GND
135	PEX_RX2#_135	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
137	PEX_RX2_137	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
139	GND_139	GND
141	PEX_RX1#_141	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
143	PEX_RX1_143	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
145	GND_145	GND
147	PEX_RX0#_147	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
149	PEX_RX0_149	PCI Express input to the Root Complex. DC blocking caps must be placed on the system board.
151	GND_151	GND
153	PEX_REFCLK#_153	PCI Reference Clock Differential Clock (-)

Pin #	Pin Name	Pin Description
155	PEX_REFCLK_155	PCI Reference Clock Differential Cock (+)
157	GND_157	GND
159	JTAG_TDO _159	No Connect
161	JTAG_TDI _161	No Connect
163	JTAG_TCLK _163	No Connect
165	JTAG_TMS _165	No Connect
167	JTAG_TRST _167	No Connect
169	LVDS_UCLK#_169	No Connect
171	LVDS_UCLK_171	No Connect
173	GND_173	GND
175	LVDS_UTX3#_175	No Connect
177	LVDS_UTX3_177	No Connect
179	GND_179	GND
181	LVDS_UTX2#_181	No Connect
183	LVDS_UTX2_183	No Connect
185	GND_185	GND
187	LVDS_UTX1#_187	No Connect
189	LVDS_UTX1_189	No Connect
191	GND_191	GND
193	LVDS_UTX0#_193	No Connect
195	LVDS_UTX0_195	No Connect
197	GND_197	GND
199	DP_C_L0#_199	DP_C_L0N and HDMI_C_D2-. DC blocking caps must be placed on the system board.
201	DP_C_L0_201	DP_C_L0P and HDMI_C_D2+. DC blocking caps must be placed on the system board.
203	GND_203	GND
205	DP_C_L1#_205	DP_C_L1N and HDMI_C_D1- DC blocking caps must be placed on the system board.
207	DP_C_L1_207	DP_C_L1P and HDMI_C_D1+. DC blocking caps must be placed on the system board.
209	GND_209	GND
211	DP_C_L2#_211	DP_C_L2N and HDMI_C_D0-. DC blocking caps must be placed on the system board.

Pin #	Pin Name	Pin Description
213	DP_C_L2_213	DP_C_L2P and HDMI_C_D0+. DC blocking caps must be placed on the system board.
215	GND_215	GND
217	DP_C_L3#_217	DP_C_L3N and HDMI_C_CK-. DC blocking caps must be placed on the system board.
219	DP_C_L3_219	DP_C_L3P and HDMI_C_CK+. DC blocking caps must be placed on the system board.
221	GND_221	GND
223	DP_C_AUX#_223	DP_C_AUXN and HDMI_C_SDA. DC blocking caps must be placed on the system board.
225	DP_C_AUX_225	DP_C_AUXP and HDMI_C_SCL. DC blocking caps must be placed on the system board.
227	RSVD_227	No Connect
229	RSVD_229	No Connect
231	RSVD_231	No Connect
233	RSVD_233	No Connect
235	RSVD_235	No Connect
237	RSVD_237	No Connect
239	RSVD_239	No Connect
241	RSVD_241	No Connect
243	RSVD_243	No Connect
245	RSVD_245	No Connect
247	RSVD_247	No Connect
249	RSVD_249	No Connect
251	GND_251	GND
253	DP_A_L0#_253	DP_E_0N and HDMI_E_D2-. DC blocking caps must be placed on the system board.
255	DP_A_L0_255	DP_E_0P and HDMI_E_D2+. DC blocking caps must be placed on the system board.
257	GND_257	GND
259	DP_A_L1#_259	DP_E_1N and HDMI_E_D1-. DC blocking caps must be placed on the system board.
261	DP_A_L1_261	DP_E_1P and HDMI_E_D1+. DC blocking caps must be placed on the system board.
263	GND_263	GND

Pin #	Pin Name	Pin Description
265	DP_A_L2#_265	DP_E_2N and HDMI_E_D0-. DC blocking caps must be placed on the system board.
267	DP_A_L2_267	DP_E_2P and HDMI_E_D0+. DC blocking caps must be placed on the system board.
269	GND_269	GND
271	DP_A_L3#_271	DP_E_3N and HDMI_E_CK-. DC blocking caps must be placed on the system board.
273	DP_A_L3_273	DP_E_3P and HDMI_E_CK+. DC blocking caps must be placed on the system board.
275	GND_275	GND
277	DP_A_AUX#_277	DP_E_AUXN and HDMI_E_SDA. DC blocking caps must be placed on the system board.
279	DP_A_AUX_279	DP_E_AUXP and HDMI_E_SDA. DC blocking caps must be placed on the system board.
281	PRSNT_L#_281	MXM module present detect. Weak pull-up required on system if module detection is desired. Module pin is connected to ground.

Pin #	Pin Name	Pin Description
E2	PWR_SRC_E2	12V
E4	GND_E4	GND
2	PRSNT_R_2	MXM module present detect. Weak pull-up required on system if module detection is desired. Module pin is connected to ground.
4	WAKE#_4	WAKE
6	PWR_GOOD_6	Power sequencing sideband. The module will assert this signal when all its internal power regulators are within the required tolerance.
8	PWR_EN_8	Module power enable. System must assert this signal to power on the module. May be asserted only after all input rails are within the specified tolerance.
10	RSVD_10	No Connect
12	RSVD_12	GND
14	RSVD_14	No Connect
16	RSVD_16	No Connect
18	PWR_LEVEL_18	Signals the module to switch to a lower power state. Modules must reduce the power by at least 20% within 50ms.
20	TH_OVERT#_20	Thermal shutdown request. System must power down the MXM module within 500ms to prevent permanent damage. Pull-up resistor to 3.3V of appropriate value is required on the system board.
22	TH_ALERT#_22	No Connect
24	TH_PWM_24	Thermal PWM. This signal may be used to control a fan connected to the module thermal solution.
26	GPIO0_26	No Connect
28	GPIO1_28	No Connect
30	GPIO2_30	No Connect
32	SMB_DAT_32	SMBus Data
34	SMB_CLK_34	SMBus Clock
36	GND_36	GND
38	0EM0_38	No Connect
40	0EM2_40	No Connect
42	0EM4_42	No Connect
44	0EM6_44	No Connect
46	GND_46	GND
48	PEX_TX15#_48	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)

Pin #	Pin Name	Pin Description
50	PEX_TX15_50	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
52	GND_52	GND
54	PEX_TX14#_54	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
56	PEX_TX14_56	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
58	GND_58	GND
60	PEX_TX13#_60	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
62	PEX_TX13_62	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
64	GND_64	GND
66	PEX_TX12#_66	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
68	PEX_TX12_68	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
70	GND_70	GND
72	PEX_TX11#_72	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
74	PEX_TX11_74	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
76	GND_76	GND
78	PEX_TX10#_78	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
80	PEX_TX10_80	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
82	GND_82	GND
84	PEX_TX9#_84	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
86	PEX_TX9_86	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
88	GND_88	GND
90	PEX_TX8#_90	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)

Pin #	Pin Name	Pin Description
92	PEX_TX8_92	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
94	GND_94	GND
96	PEX_TX7#_96	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
98	PEX_TX7_98	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
100	GND_100	GND
102	PEX_TX6#_102	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
104	PEX_TX6_104	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
106	GND_106	GND
108	PEX_TX5#_108	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
110	PEX_TX5_110	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
112	GND_112	GND
114	PEX_TX4#_114	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
116	PEX_TX4_116	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
118	GND_118	GND
120	PEX_TX3#_120	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
122	PEX_TX3_122	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
124	GND_124	GND
134	GND_134	GND
136	PEX_TX2#_136	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
138	PEX_TX2_138	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
140	GND_140	GND

Pin #	Pin Name	Pin Description
142	PEX_TX1#_142	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
144	PEX_TX1_144	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
146	GND_146	GND
148	PEX_TX0#_148	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
150	PEX_TX0_150	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
152	GND_152	GND
154	CLK_REQ#_154	PCI Express clock request. Pull-up resistor to 3.3V is required on the system board if the function is supported
156	PEX_RST#_156	No Connect
158	VGA_DDC_DAT_158	MXM Config Flash Rom For AMD
160	VGA_DDC_CLK_160	MXM Config Flash Rom For AMD
162	VGA_VSYC_162	No Connect
164	VGA_HSYC_164	No Connect
166	GND_166	GND
168	VGA_RED_168	No Connect
170	VGA_GREEN_170	No Connect
172	VGA_BLUE_172	No Connect
174	GND_174	GND
176	LVDS_LCLK#_176	No Connect
178	LVDS_LCLK_178	No Connect
180	GND_180	GND
182	LVDS_LTX3#_182	No Connect
184	LVDS_LTX3_184	No Connect
186	GND_186	GND
188	LVDS_LTX2#_188	No Connect
190	LVDS_LTX2_190	No Connect
192	GND_192	GND
194	LVDS_LTX1#_194	No Connect
196	LVDS_LTX1_196	No Connect
198	GND_198	GND

Pin #	Pin Name	Pin Description
200	LVDS_LTX0#_200	No Connect
202	LVDS_LTX0_202	No Connect
204	GND_204	GND
206	DP_D_L0#_206	DP_D_0N and HDMI_D_D2-. DC blocking caps must be placed on the system board.
208	DP_D_L0_208	DP_D_0P and HDMI_D_D2+. DC blocking caps must be placed on the system board.
210	GND_210	GND
212	DP_D_L1#_212	DP_D_1N and HDMI_D_D1-. DC blocking caps must be placed on the system board.
214	DP_D_L1_214	DP_D_1P and HDMI_D_D1+. DC blocking caps must be placed on the system board.
216	GND_216	GND
218	DP_D_L2#_218	DP_D_2N and HDMI_D_D0-. DC blocking caps must be placed on the system board.
220	DP_D_L2_220	DP_D_2P and HDMI_D_D0+. DC blocking caps must be placed on the system board.
222	GND_222	GND
224	DP_D_L3#_224	DP_D_3N and HDMI_D_CK-. DC blocking caps must be placed on the system board.
226	DP_D_L3_226	DP_D_3P and HDMI_D_CK+. DC blocking caps must be placed on the system board.
228	GND_228	GND
230	DP_D_AUX#_230	DP_D_AUXN and HDMI_D_SDA. DC blocking caps must be placed on the system board.
232	DP_D_AUX_232	DP_D_AUXP and HDMI_D_SCL. DC blocking caps must be placed on the system board.
234	DP_C_HPD_234	DisplayPort C hot plug detect.
236	DP_D_HPD_236	DisplayPort D hot plug detect.
238	RSVD_238	No Connect
240	RSVD_240	No Connect
242	RSVD_242	No Connect
244	GND_244	GND
246	DP_B_L0#_246	DP_F_0N and HDMI_F_D2-. DC blocking caps must be placed on the system board.

Pin #	Pin Name	Pin Description
248	DP_B_L0_248	DP_F_0P and HDMI_F_D2+. DC blocking caps must be placed on the system board.
250	GND_250	GND
252	DP_B_L1#_252	DP_F_1N and HDMI_F_D1-. DC blocking caps must be placed on the system board.
254	DP_B_L1_254	DP_F_1P and HDMI_F_D1+. DC blocking caps must be placed on the system board.
256	GND_256	GND
258	DP_B_L2#_258	DP_F_2N and HDMI_F_D0-. DC blocking caps must be placed on the system board.
260	DP_B_L2_260	DP_F_2P and HDMI_F_D0+. DC blocking caps must be placed on the system board.
262	GND_262	GND
264	DP_B_L3#_264	DP_F_3N and HDMI_F_CK-. DC blocking caps must be placed on the system board.
266	DP_B_L3_266	DP_F_3P and HDMI_F_CK+. DC blocking caps must be placed on the system board.
268	GND_268	GND
270	DP_B_AUX#_270	DP_F_AUXN and HDMI_F_SDA. DC blocking caps must be placed on the system board.
272	DP_B_AUX_272	DP_F_AUXP and HDMI_F_SCL. DC blocking caps must be placed on the system board.
274	DP_B_HPD_274	DisplayPort F hot plug detect.
276	DP_A_HPD_276	DisplayPort E hot plug detect.
278	3V3_278	3.3V
280	280	N/A

Pin #	Pin Name	Pin Description
E2	PWR_SRC_E2	Main power source 7-20V (recommend using 12V) up to 10A
E4	GND_E4	GND
2	PRSNT_R_2	MXM module present detect. Weak pull-up required on system if module detection is desired. Module pin is connected to ground.
4	WAKE#_4	WAKE
6	PWR_GOOD_6	Power sequencing sideband. The module will assert this signal when all its internal power regulators are within the required tolerance.
8	PWR_EN_8	Module power enable. System must assert this signal to power on the module. May be asserted only after all input rails are within the specified tolerance.
10	27MHZ_REF	27MHZ_REF
12	GND	GND
14	LVDS_U_HPD	DP_F_HPD LVDS_U_HPD
16	RSVD_16	RSVD_16
18	PWR_LEVEL_18	Signals the module to switch to a lower power state. Modules must reduce the power by at least 20% within 50ms.
20	TH_OVERT#_20	Thermal shutdown request. System must power down the MXM module within 500ms to prevent permanent damage. Pull-up resistor to 3.3V of appropriate value is required on the system board.
22	TH_ALERT#_22	Thermal interrupt request. Signal may be used by the system to signal to module to reduce power consumption. The signal may also be used by the module to signal to the system a non critical temperature alert. Pull-up resistor to 3.3V of appropriate value is required on the system board.
24	TH_PWM_24	Thermal PWM. This signal may be used to control a fan connected to the module thermal solution.
26	GPIO0_26	GPIO0
28	GPIO1_28	GPIO1
30	GPIO2_30	GPIO2
32	SMB_DAT_32	SMBus Data
34	SMB_CLK_34	SMBus Clock
36	GND_36	GND
38	0EM0_38	0EM0_38
40	0EM2_40	0EM2_40
42	0EM4_42	0EM4_42

Pin #	Pin Name	Pin Description
44	0EM6_44	0EM6_44
46	GND_46	GND
48	PEX_TX15#_48	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
50	PEX_TX15_50	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
52	GND_52	GND
54	PEX_TX14#_54	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
56	PEX_TX14_56	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
58	GND_58	GND
60	PEX_TX13#_60	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
62	PEX_TX13_62	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
64	GND_64	GND
66	PEX_TX12#_66	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
68	PEX_TX12_68	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
70	GND_70	GND
72	PEX_TX11#_72	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
74	PEX_TX11_74	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
76	GND_76	GND
78	PEX_TX10#_78	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
80	PEX_TX10_80	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
82	GND_82	GND
84	PEX_TX9#_84	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
86	PEX_TX9_86	PCI Express output from the Root Complex. DC blocking caps must

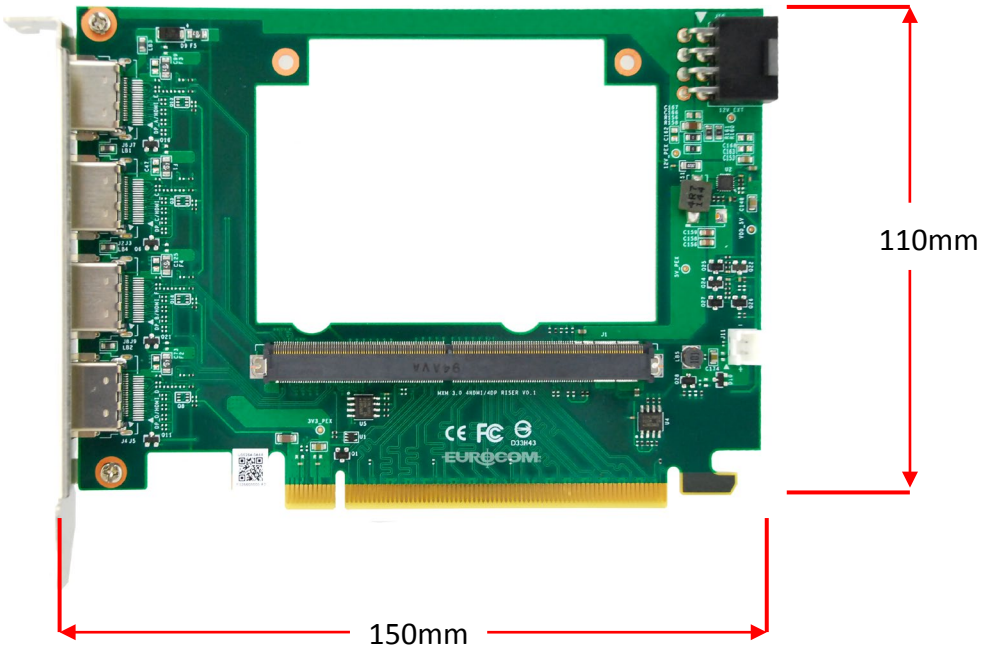
Pin #	Pin Name	Pin Description
		be placed on the system board. (+)
88	GND_88	GND
90	PEX_TX8#_90	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
92	PEX_TX8_92	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
94	GND_94	GND
96	PEX_TX7#_96	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
98	PEX_TX7_98	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
100	GND_100	GND
102	PEX_TX6#_102	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
104	PEX_TX6_104	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
106	GND_106	GND
108	PEX_TX5#_108	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
110	PEX_TX5_110	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
112	GND_112	GND
114	PEX_TX4#_114	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
116	PEX_TX4_116	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
118	GND_118	GND
120	PEX_TX3#_120	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
122	PEX_TX3_122	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
124	GND_124	GND
134	GND_134	GND
136	PEX_TX2#_136	PCI Express output from the Root Complex. DC blocking caps must

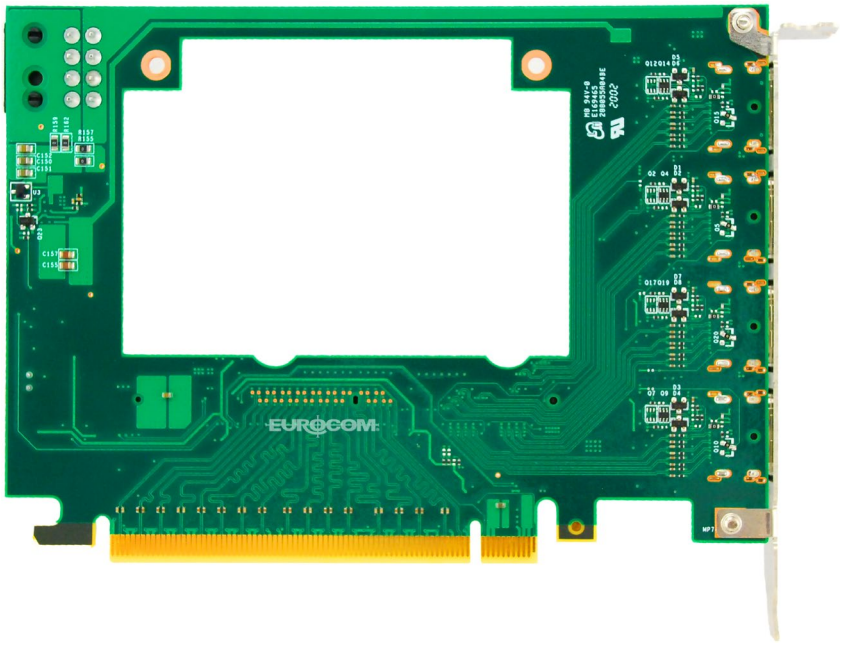
Pin #	Pin Name	Pin Description
		be placed on the system board. (-)
138	PEX_TX2_138	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
140	GND_140	GND
142	PEX_TX1#_142	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
144	PEX_TX1_144	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
146	GND_146	GND
148	PEX_TX0#_148	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (-)
150	PEX_TX0_150	PCI Express output from the Root Complex. DC blocking caps must be placed on the system board. (+)
152	GND_152	GND
154	CLK_REQ#_154	PCI Express clock request. Pull-up resistor to 3.3V is required on the system board if the function is supported
156	PEX_RST#_156	PCI Express reset signal.
158	VGA_DDC_DAT_158	N/A
160	VGA_DDC_CLK_160	N/A
162	VGA_VSYC_162	N/A
164	VGA_HSYC_164	N/A
166	GND_166	GND
168	VGA_RED_168	N/A
170	VGA_GREEN_170	N/A
172	VGA_BLUE_172	N/A
174	GND_174	GND
176	LVDS_LCLK#_176	DP_E_L3 LVDS_LCLK#. DC blocking caps must be placed on the system board.
178	LVDS_LCLK_178	DP_E_L3 LVDS_LCLK. DC blocking caps must be placed on the system board.
180	GND_180	GND
182	LVDS_LTX3#_182	DP_E_AUX LVDS_LTX3#. DC blocking caps must be placed on the system board.
184	LVDS_LTX3_184	DP_E_AUX LVDS_LTX3. DC blocking caps must be placed on the system board.

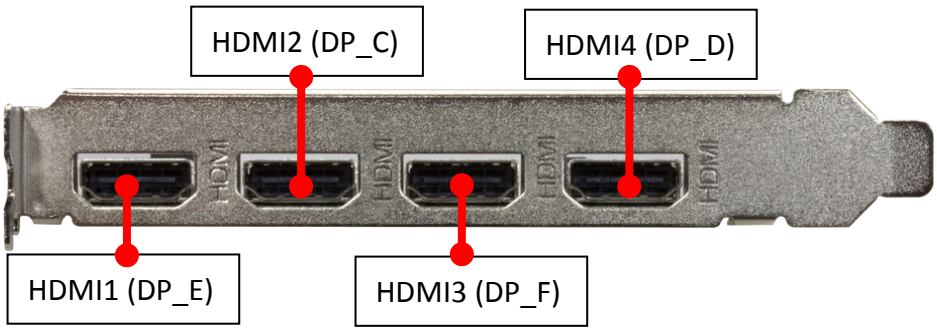
Pin #	Pin Name	Pin Description
186	GND_186	GND
188	LVDS_LTX2#_188	DP_E_L0 LVDS_LTX2#. DC blocking caps must be placed on the system board.
190	LVDS_LTX2_190	DP_E_L0 LVDS_LTX2. DC blocking caps must be placed on the system board.
192	GND_192	GND
194	LVDS_LTX1#_194	DP_E_L1 LVDS_LTX1#. DC blocking caps must be placed on the system board.
196	LVDS_LTX1_196	. DC blocking caps must be placed on the system board.
198	GND_198	GND
200	LVDS_LTX0#_200	DP_E_L2 LVDS_LTX0#. DC blocking caps must be placed on the system board.
202	LVDS_LTX0_202	DP_E_L2 LVDS_LTX0. DC blocking caps must be placed on the system board.
204	GND_204	GND
206	DP_D_L0#_206	DP_D_L0#. DC blocking caps must be placed on the system board.
208	DP_D_L0_208	DP_D_L0. DC blocking caps must be placed on the system board.
210	GND_210	GND
212	DP_D_L1#_212	DP_D_L1#. DC blocking caps must be placed on the system board.
214	DP_D_L1_214	DP_D_L1. DC blocking caps must be placed on the system board.
216	GND_216	GND
218	DP_D_L2#_218	DP_D_L2#. DC blocking caps must be placed on the system board.
220	DP_D_L2_220	DP_D_L2. DC blocking caps must be placed on the system board.
222	GND_222	GND
224	DP_D_L3#_224	DP_D_L3#. DC blocking caps must be placed on the system board.
226	DP_D_L3_226	DP_D_L3. DC blocking caps must be placed on the system board.
228	GND_228	GND
230	DP_D_AUX#_230	DP_D_AUX#. DC blocking caps must be placed on the system board.
232	DP_D_AUX_232	DP_D_AUX. DC blocking caps must be placed on the system board.
234	DP_C_HPD_234	DisplayPort C hot plug detect.
236	DP_D_HPD_236	DisplayPort D hot plug detect.
238	RSVD_238	N/A
240	3V3_240	3V3
242	3V3_242	3V3

Pin #	Pin Name	Pin Description
244	GND_244	GND
246	DP_B_L0#_246	DP_B_L0#. DC blocking caps must be placed on the system board.
248	DP_B_L0_248	DP_B_L0. DC blocking caps must be placed on the system board.
250	GND_250	GND
252	DP_B_L1#_252	DP_B_L1#. DC blocking caps must be placed on the system board.
254	DP_B_L1_254	DP_B_L1. DC blocking caps must be placed on the system board.
256	GND_256	GND
258	DP_B_L2#_258	DP_B_L2#. DC blocking caps must be placed on the system board.
260	DP_B_L2_260	DP_B_L2. DC blocking caps must be placed on the system board.
262	GND_262	GND
264	DP_B_L3#_264	DP_B_L3#. DC blocking caps must be placed on the system board.
266	DP_B_L3_266	DP_B_L3. DC blocking caps must be placed on the system board.
268	GND_268	GND
270	DP_B_AUX#_270	DP_B_AUX#. DC blocking caps must be placed on the system board.
272	DP_B_AUX_272	DP_B_AUX. DC blocking caps must be placed on the system board.
274	DP_B_HPD_274	DisplayPort B hot plug detect.
276	DP_A_HPD_276	DisplayPort A hot plug detect.
278	3V3_278	3.3V
280	280	N/A

4. Output configuration and Board Dimension







Revision History

Rev.	Data	History
1.0	2020/06/17	First release