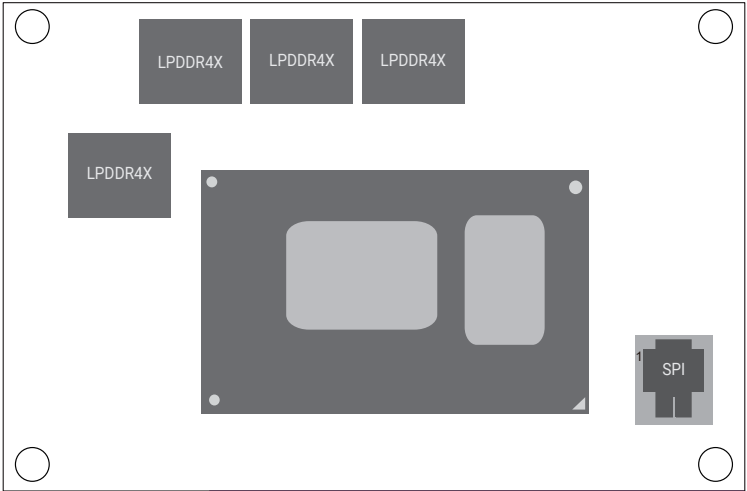
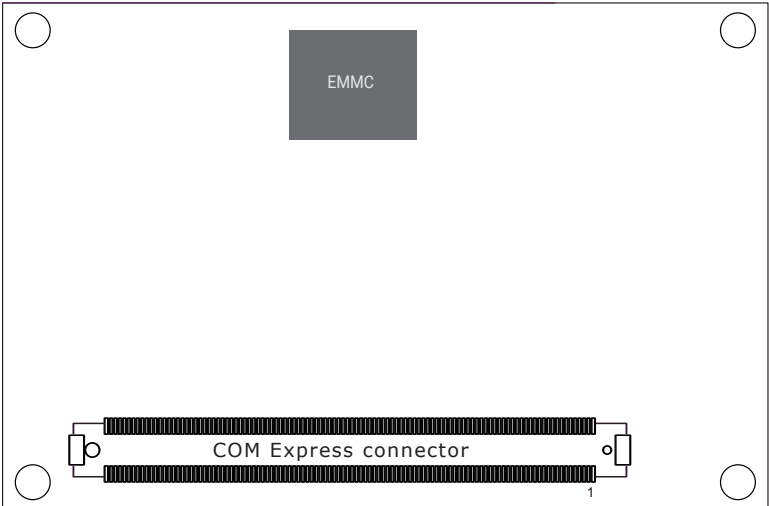


Board Layout and COM Express Pin Assignments

TOP



BOTTOM



► COM Express Pin Assignments

Pin List for Pin-Out Type 10

The table below is a comprehensive list of all signal pins supported on the single 220-pin COM Express connectors as defined for Type 10 in the PICMG COM.0 R3.0 specification.

Pin	Row A	"EHL9A2 Difference"	Row B	"EHL9A2 Difference"
1	GND(FIXED)		GND(FIXED)	
2	GBE0_MDI3-		GBE0_ACT#	
3	GBE0_MDI3+		LPC_FRAME#	
4	GBE0_LINK100#	GBE1_LED1000#	LPC_AD0	
5	GBE0_LINK1000#	GBE1_LED2500#	LPC_AD1	
6	GBE0_MDI2-		LPC_AD2	
7	GBE0_MDI2+		LPC_AD3	
8	GBE0_LINK#		LPC_DRQ0#	PU 10K to 3.3V
9	GBE0_MDI1-		LPC_DRQ1#	PU 10K to 3.3V
10	GBE0_MDI1+		LPC_CLK	
11	GND(FIXED)		GND(FIXED)	
12	GBE0_MDI0-		PWRBTN#	
13	GBE0_MDI0+		SMB_CK	
14	GBE0_CTREF	NC	SMB_DAT	
15	SUS_S3#		SMB_ALERT#	
16	SATA0_TX+		SATA1_TX+	
17	SATA0_TX-		SATA1_TX-	
18	SUS_S4#		SUS_STAT#	PU 10K to 3.3VSB
19	SATA0_RX+		SATA1_RX+	
20	SATA0_RX-		SATA1_RX-	
21	GND(FIXED)		GND(FIXED)	
22	USB_SSRX0-		USB_SSTX0-	
23	USB_SSRX0+		USB_SSTX0+	
24	SUS_S5#		PWR_OK	
25	USB_SSRX1-		USB_SSTX1-	
26	USB_SSRX1+		USB_SSTX1+	

Pin	Row A	"EHL9A2 Difference"	Row B	"EHL9A2 Difference"
27	BATLOW#		WDT	
28	(S)ATA_ACT#		HDA_SDIN2	NC
29	HDA_SYNC		HDA_SDIN1	
30	HDA_RST#		HDA_SDIN0	
31	GND(FIXED)		GND(FIXED)	
32	HDA_BITCLK		SPKR	
33	HDA_SDOUT		I2C_CK	
34	BIOS_DIS0#		I2C_DAT	
35	THRMTRIP#		THRM#	
36	USB6-		USB7-	
37	USB6+		USB7+	
38	USB_6_7_OC#		USB_4_5_OC#	
39	USB4-		USB5-	
40	USB4+		USB5+	
41	GND(FIXED)		GND(FIXED)	
42	USB2-		USB3-	
43	USB2+		USB3+	
44	USB_2_3_OC#		USB_0_1_OC#	
45	USB0-		USB1-	
46	USB0+		USB1+	
47	VCC_RTC		ESPI_EN#	NC
48	RSVD		USB0_HOST_PRSNT	NC
49	GBE0_SDP		SYS_RESET#	
50	LPC_SERIRQ		CB_RESET#	
51	GND(FIXED)		GND(FIXED)	
52	RSVD		RSVD	
53	RSVD		RSVD	
54	GPI0/SD_DATA0**		GPO1/SD_CMD**	
55	RSVD		RSVD	
56	RSVD		RSVD	

Pin	Row A	"EHL9A2 Difference"	Row B	"EHL9A2 Difference"
57	GND		GPO2/SD_WP**	
58	PCIE_TX3+		PCIE_RX3+	
59	PCIE_TX3-		PCIE_RX3-	
60	GND(FIXED)		GND(FIXED)	
61	PCIE_TX2+		PCIE_RX2+	
62	PCIE_TX2-		PCIE_RX2-	
63	GPI1/SD_DATA1**		GPO3/SD_CD#**	
64	PCIE_TX1+		PCIE_RX1+	
65	PCIE_TX1-		PCIE_RX1-	
66	GND		WAKE0#	
67	GPI2/SD_DATA2**		WAKE1#	
68	PCIE_TX0+		PCIE_RX0+	
69	PCIE_TX0-		PCIE_RX0-	
70	GND(FIXED)		GND(FIXED)	
71	LVDS_A0+/eDP_TX2+**		DDIO_PAIR0+	
72	LVDS_A0-/eDP_TX2-**		DDIO_PAIR0-	
73	LVDS_A1+/eDP_TX1+**		DDIO_PAIR1+	
74	LVDS_A1-/eDP_TX1-**		DDIO_PAIR1-	
75	LVDS_A2+/eDP_TX0+**		DDIO_PAIR2+	
76	LVDS_A2-/eDP_TX0-**		DDIO_PAIR2-	
77	LVDS_VDD_EN/ eDP_VDD_EN**		DDIO_PAIR4+	NC
78	LVDS_A3+		DDIO_PAIR4-	NC
79	LVDS_A3-		LVDS_BKLT_EN/ eDP_BKLT_EN**	
80	GND(FIXED)		GND(FIXED)	
81	LVDS_A_CK+/ eDP_TX3+**		DDIO_PAIR3+	
82	LVDS_A_CK-/ eDP_TX3-**		DDIO_PAIR3-	
83	LVDS_I2C_CK/ eDP_AUX+**		LVDS_BKLT_TRL/ eDP_BKLT_CTRL**	
84	LVDS_I2C_DAT/ eDP_AUX-**		VCC_5V_SBY	
85	GPI3/SD_DATA3**		VCC_5V_SBY	
86	RSVD		VCC_5V_SBY	
87	eDP_HPD**		VCC_5V_SBY	
88	PCIE_CLK_REF+		BIOS_DIS1#	

Pin	Row A	"EHL9A2 Difference"	Row B	"EHL9A2 Difference"
89	PCIE_CLK_REF-		DDIO_HPD	
90	GND(FIXED)		GND(FIXED)	
91	SPI_POWER		DDIO_PAIR5+	NC
92	SPI_MISO		DDIO_PAIR5-	NC
93	GPO0/SD_CLK**		DDIO_PAIR6+	NC
94	SPI_CLK		DDIO_PAIR6-	NC
95	SPI_MOSI		DDIO_DDC_AUX_SEL	
96	TPM_PP		USB7_HOST_PRSENT	NC
97	TYPE10#		SPI_CS#	
98	SER0_TX		DDIO_CTRLCLK_AUX+	
99	SER0_RX		DDIO_CTRLDATA_AUX-	
100	GND(FIXED)		GND(FIXED)	
101	SER1_TX		FAN_PWMOUT	
102	SER1_RX		FAN_TACHIN	
103	LID#		SLEEP#	
104	VCC_12V		VCC_12V	
105	VCC_12V		VCC_12V	
106	VCC_12V		VCC_12V	
107	VCC_12V		VCC_12V	
108	VCC_12V		VCC_12V	
109	VCC_12V		VCC_12V	
110	GND(FIXED)		GND(FIXED)	



Note:

1. ** eDP (in place of LVDS) is BOM option supported by project basis.
2. ** SD (in place of GPIO) is BOM option supported by project basis.
3. EHL9A2 (Mini module) allows wide range input voltage with 4.75V to 20V from VCC_12V power pins.
4. For PCIe device down components on the carrier board, please use and place on the PCIe Lane0 port first.



DFI reserves the right to change the specifications at any time prior to the product's release. This QR may be based on the product's revision. For more documentation and drivers, please visit the download page at www.dfi.com/downloadcenter, or via the QR codes to the right.

