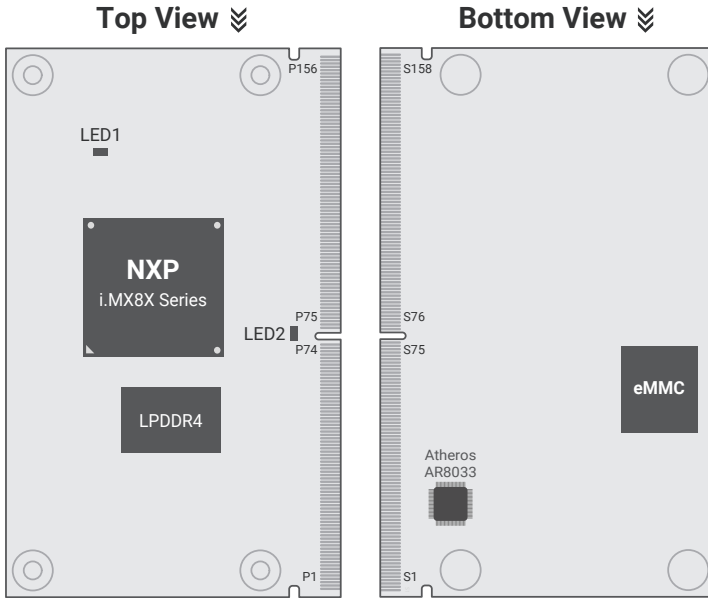


Board Layout and SMARC Pin Assignments



P-PIN	SMARC R2.0	F8S00 Edge Connector	S-Pin	SMARC R2.0	F8S00 Edge Connector
P1	SMB_ALERT_1V8#	SMB_ALERT	S1	CSI1_TX+ / I2C_CAM1_CK	MIPI_CSI0_I2C0_SCL
P2	GND	GND	S2	CSI1_TX- / I2C_CAM1_DAT	MIPI_CSI0_I2C0_SDA
P3	CSI1_CK+	MIPI_CSI0_CLK_P	S3	GND	N/A
P4	CSI1_CK-	MIPI_CSI0_CLK_N	S4	RSVD	N/A
P5	GBE1_SDP	N/A	S5	CSI0_TX- / I2C_CAM0_CK	N/A
P6	GBE0_SDP	N/A	S6	CAM_MCK	MIPI_CSI0_MCLK_OUT
P7	CSI1_RX0+	MIPI_CSI0_DATA0_P	S7	CSI0_TX+ / I2C_CAM0_DAT	N/A
P8	CSI1_RX0-	MIPI_CSI0_DATA0_N	S8	CSI0_CK+	N/A
P9	GND	GND	S9	CSI0_CK-	N/A
P10	CSI1_RX1+	MIPI_CSI0_DATA1_P	S10	GND	GND
P11	CSI1_RX1-	MIPI_CSI0_DATA1_N	S11	CSI0_RX0+	N/A
P12	GND	GND	S12	CSI0_RX0-	N/A
P13	CSI1_RX2+	MIPI_CSI0_DATA2_P	S13	GND	GND
P14	CSI1_RX2-	MIPI_CSI0_DATA2_N	S14	CSI0_RX1+	N/A
P15	GND	GND	S15	CSI0_RX1-	N/A
P16	CSI1_RX3+	MIPI_CSI0_DATA3_P	S16	GND	GND
P17	CSI1_RX3-	MIPI_CSI0_DATA3_N	S17	GBE1_MDIO+	N/A
P18	GND	GND	S18	GBE1_MDIO-	N/A
P19	GBE0_MDIO3-	MDIO3_N	S19	GBE1_LINK100#	N/A
P20	GBE0_MDIO3+	MDIO3_P	S20	GBE1_MDIO1+	N/A
			S21	GBE1_MDIO1-	N/A

P-PIN	SMARC R2.0	F8S00 Edge Connector	S-Pin	SMARC R2.0	F8S00 Edge Connector
P21	GBE0_LINK100#	RGMII_LED_10_100	S22	GBE1_LINK1000#	N/A
P22	GBE0_LINK1000#	RGMII_LED_1000	S23	GBE1_MDI2+	N/A
P23	GBE0_MDI2-	MDI2_N	S24	GBE1_MDI2-	N/A
P24	GBE0_MDI2+	MDI2_P	S25	GND	GND
P25	GBE0_LINK_ACT#	RGMII_LED_ACT	S26	GBE1_MDI3+	N/A
P26	GBE0_MDI1-	MDI1_N	S27	GBE1_MDI3-	N/A
P27	GBE0_MDI1+	MDI1_P	S28	GBE1_CTREF	N/A
P28	GBE0_CTREF	N/A	S29	PCI_E_D_TX+	N/A
P29	GBE0_MDI0-	MDI0_N	S30	PCI_E_D_TX-	N/A
P30	GBE0_MDI0+	MDI0_P	S31	GBE1_LINK_ACT#	N/A
P31	SPI0_CS1#	SPI0_CS1	S32	PCI_E_D_RX+	N/A
P32	GND	GND	S33	PCI_E_D_RX-	N/A
P33	SDIO_WP	SD_WP	S34	GND	GND
P34	SDIO_CMD	SD_CMD	S35	USB4+	USB_DP5
P35	SDIO_CD#	SD_CD_B	S36	USB4-	USB_DN5
P36	SDIO_CK	SD_CLK	S37	USB3_VBUS_DET	N/A
P37	SDIO_PWR_EN	SD_PWR_EN	S38	AUDIO_MCK	AUDIO_MCLK
P38	GND	GND	S39	I2S0_LRCK	SAI0_TXFS
P39	SDIO_D0	SD_DAT0	S40	I2S0_SDOUT	SAI0_TXD
P40	SDIO_D1	SD_DAT1	S41	I2S0_SDIN	SAI0_RXD
P41	SDIO_D2	SD_DAT2	S42	I2S0_CK	SAI0_CK
P42	SDIO_D3	SD_DAT3	S43	ESPI_ALERT0#	QSPI_ALERT0
P43	SPI0_CS0#	SPI0_CS0	S44	ESPI_ALERT1#	QSPI_ALERT1
P44	SPI0_CK	SPI0_SCK	S45	RSVD	N/A
P45	SPI0_DIN	SPI0_MISO	S46	RSVD	N/A
P46	SPI0_DO	SPI0_MOSI	S47	GND	GND
P47	GND	GND	S48	I2C_GP_CK	I2C_GP_CK
P48	SATA_TX+	SATA_TXP	S49	I2C_GP_DAT	I2C_GP_DAT
P49	SATA_TX-	SATA_TXN	S50	HDA_SYNC / I2S2_LRCK	N/A
P50	GND	GND	S51	HDA_SDO / I2S2_SDOUT	N/A
P51	SATA_RX+	SATA_RXP	S52	HDA_SDI / I2S2_SDIN	N/A
P52	SATA_RX-	SATA_RXN	S53	HDA_CK / I2S2_CK	N/A
P53	GND	GND	S54	SATA_ACT#	SATA_ACT
P54	ESPI_CS0#	QSPI0A_CS0	S55	USB5_EN_OC#	USB_EN_OC#6
P55	ESPI_CS1#	QSPI0A_CS1	S56	ESPI_IO_2	QSPI0A_D2
P56	ESPI_CK	QSPI0A_CLK	S57	ESPI_IO_3	QSPI0A_D3
P57	ESPI_IO_0	QSPI0A_D0	S58	ESPI_RESET#	QSPI0A_RST#
P58	ESPI_IO_1	QSPI0A_D1	S59	USB5+	USB_DP6
P59	GND	GND	S60	USB5-	USB_DN6
P60	USB0+	USB_OTG1_DP	S61	GND	GND
P61	USB0-	USB_OTG1_DN	S62	USB3_SSTX+	USB3_TXP2
P62	USB0_EN_OC#	OTG_EN_OC	S63	USB3_SSTX-	USB3_TXN2
P63	USB0_VBUS_DET	USB_VBUS_DET	S64	GND	GND
P64	USB0_OTG_ID	USB_OTG1_ID	S65	USB3_SSRX+	USB3_RXP2
P65	USB1+	USB_DP4	S66	USB3_SSRX-	USB3_RXN2
P66	USB1-	USB_DN4	S67	GND	GND
P67	USB1_EN_OC#	USB_EN_OC	S68	USB3+	USB_DP2
P68	GND	GND	S69	USB3-	USB_DN2
P69	USB2+	USB_DP1	S70	GND	GND
P70	USB2-	USB_DN1	S71	USB2_SSTX+	USB3_TXP1
P71	USB2_EN_OC#	USB_EN_OC#1	S72	USB2_SSTX-	USB3_TXN1
P72	RSVD	USB_EN_OC#2	S73	GND	GND
P73	RSVD	N/A	S74	USB2_SSRX+	USB3_RXP1
P74	USB3_EN_OC#	N/A	S75	USB2_SSRX-	USB3_RXN1
P75	PCI_E_A_RST#	PCI_E_RST	S76	PCI_E_B_RST#	N/A
P76	USB4_EN_OC#	USB_EN_OC#5	S77	PCI_E_C_RST#	N/A

P-PIN	SMARC R2.0	F8S00 Edge Connector	S-Pin	SMARC R2.0	F8S00 Edge Connector
P77	RSVD	N/A	S78	PCIE_C_RX+	N/A
P78	RSVD	N/A	S79	PCIE_C_RX-	N/A
P79	GND	GND	S80	GND	GND
P80	PCIE_C_REFCK+	N/A	S81	PCIE_C_TX+	N/A
P81	PCIE_C_REFCK-	N/A	S82	PCIE_C_TX-	N/A
P82	GND	GND	S83	GND	GND
P83	PCIE_A_REFCK+	PCIE_REFCLK_P	S84	PCIE_B_REFCK+	N/A
P84	PCIE_A_REFCK-	PCIE_REFCLK_N	S85	PCIE_B_REFCK-	N/A
P85	GND	GND	S86	GND	GND
P86	PCIE_A_RX+	PCIE_RX_P	S87	PCIE_B_RX+	N/A
P87	PCIE_A_RX-	PCIE_RX_N	S88	PCIE_B_RX-	N/A
P88	GND	GND	S89	GND	GND
P89	PCIE_A_TX+	PCIE_TX_P	S90	PCIE_B_TX+	N/A
P90	PCIE_A_TX-	PCIE_TX_N	S91	PCIE_B_TX-	N/A
P91	GND	GND	S92	GND	GND
P92	HDMI_D2+ / DP1_LANE0+	HDMI_D2P	S93	DP0_LANE0+	N/A
P93	HDMI_D2- / DP1_LANE0-	HDMI_D2M	S94	DP0_LANE0-	N/A
P94	GND	GND	S95	DP0_AUX_SEL	N/A
P95	HDMI_D1+ / DP1_LANE1+	HDMI_D1P	S96	DP0_LANE1+	N/A
P96	HDMI_D1- / DP1_LANE1-	HDMI_D1M	S97	DP0_LANE1-	N/A
P97	GND	GND	S98	DP0_HPDP	N/A
P98	HDMI_D0+ / DP1_LANE2+	HDMI_D0P	S99	DP0_LANE2+	N/A
P99	HDMI_D0- / DP1_LANE2-	HDMI_D0M	S100	DP0_LANE2-	N/A
P100	GND	GND	S101	GND	GND
P101	HDMI_CLK+ / DP1_LANE3+	HDMI_CLKP	S102	DP0_LANE3+	N/A
P102	HDMI_CLK- / DP1_LANE3-	HDMI_CLKM	S103	DP0_LANE3-	N/A
P103	GND	GND	S104	USB3_OTG_ID	N/A
P104	HDMI_HPD / DP1_HPD	HDMI_HPD	S105	DP0_AUX+	N/A
P105	HDMI_CTRL_CLK / DP1_AUX+	HDMI_DDC_CLK	S106	DP0_AUX-	N/A
P106	HDMI_CTRL_DAT / DP1_AUX-	HDMI_DDC_DAT	S107	LCD1_BKLT_EN	N/A
P107	DP1_AUX_SEL	N/A	S108	LVDS1_CK+ / eDP1_AUX+ / DSI1_CLK+	N/A
P108	GPIO0 / CAM0_PWR#	SMARC_GPIO0	S109	LVDS1_CK- / eDP1_AUX- / DSI1_CLK-	N/A
P109	GPIO1 / CAM1_PWR#	MIPL_CSI0_EN_PWR	S110	GND	GND
P110	GPIO2 / CAM0_RST#	SMARC_GPIO2	S111	LVDS1_0+ / eDP1_TX0+ / DSI1_D0+	N/A
P111	GPIO3 / CAM1_RST#	MIPL_CSI0_RST	S112	LVDS1_0- / eDP1_TX0- / DSI1_D0-	N/A
P112	GPIO4 / HDA_RST#	SMARC_GPIO4	S113	eDP1_HPD	N/A
P113	GPIO5 / PWM_OUT	SMARC_GPIO5	S114	LVDS1_1+ / eDP1_TX1+ / DSI1_D1+	N/A
P114	GPIO6 / TACHIN	SMARC_GPIO6	S115	LVDS1_1- / eDP1_TX1- / DSI1_D1-	N/A
P115	GPIO7	SMARC_GPIO7	S116	LCD1_VDD_EN	N/A
P116	GPIO8	SMARC_GPIO8	S117	LVDS1_2+ / eDP1_TX2+ / DSI1_D2+	N/A
P117	GPIO9	SMARC_GPIO9	S118	LVDS1_2- / eDP1_TX2- / DSI1_D2-	N/A
P118	GPIO10	SMARC_GPIO10	S119	GND	GND

P-PIN	SMARC R2.0	F8S00 Edge Connector	S-Pin	SMARC R2.0	F8S00 Edge Connector
P119	GPIO11	SMARC_GPIO11	S120	LVDS1_3+ / eDP1_TX3+ / DSI1_D3+	N/A
P120	GND	GND	S121	LVDS1_3- / eDP1_TX3- / DSI1_D3-	N/A
P121	I2C_PM_CK	I2C_PM_CK	S122	LCD1_BKLT_PWM	N/A
P122	I2C_PM_DAT	I2C_PM_DAT	S123	RSVD	Debug_TX
P123	BOOT_SEL0#	BOOT_SEL0	S124	GND	GND
P124	BOOT_SEL1#	BOOT_SEL1	S125	LVDS0_0+ / eDP0_TX0+ / DSI0_D0+	eDP_D0P
P125	BOOT_SEL2#	BOOT_SEL2	S126	LVDS0_0- / eDP0_TX0- / DSI0_D0-	eDP_D0N
P126	RESET_OUT#	RESET_OUT	S127	LCD0_BKLT_EN	eDP_BKLT_EN
P127	RESET_IN#	RESET_IN	S128	LVDS0_1+ / eDP0_TX1+ / DSI0_D1+	eDP_D1P
P128	POWER_BTN#	PWRBTN	S129	LVDS0_1- / eDP0_TX1- / DSI0_D1-	eDP_D1N
P129	SER0_TX	UART1_TX	S130	GND	GND
P130	SER0_RX	UART1_RX	S131	LVDS0_2+ / eDP0_TX2+ / DSI0_D2+	eDP_D2P
P131	SER0_RTS#	UART1_RTS	S132	LVDS0_2- / eDP0_TX2- / DSI0_D2-	eDP_D2N
P132	SER0_CTS#	UART1_CTS	S133	LCD0_VDD_EN	eDP_VDD_EN
P133	GND	GND	S134	LVDS0_CK+ / eDP0_AUX+ / DSI0_CLK+	eDP_AUXP
P134	SER1_TX	UART0_TX	S135	LVDS0_CK- / eDP0_AUX- / DSI0_CLK-	eDP_AUXN
P135	SER1_RX	UART0_RX	S136	GND	GND
P136	SER2_TX	N/A	S137	LVDS0_3+ / eDP0_TX3+ / DSI0_D3+	eDP_D3P
P137	SER2_RX	N/A	S138	LVDS0_3- / eDP0_TX3- / DSI0_D3-	eDP_D3N
P138	SER2_RTS#	N/A	S139	I2C_LCD_CK	I2C_LCD_CK
P139	SER2_CTS#	N/A	S140	I2C_LCD_DAT	I2C_LCD_DAT
P140	SER3_TX	UART2_TX	S141	LCD0_BKLT_PWM	MIPI_DSI0_PWM
P141	SER3_RX	UART2_RX	S142	RSVD	Debug_RX
P142	GND	GND	S143	GND	GND
P143	CAN0_TX	CAN0_TX	S144	eDP0_HPD	eDP0_HPD
P144	CAN0_RX	CAN0_RX	S145	WDT_TIME_OUT#	PMIC_WDOG_IN
P145	CAN1_TX	CAN1_TX	S146	PCIE_WAKE#	PCIE_WAKE#
P146	CAN1_RX	CAN1_RX	S147	VDD_RTC	VDD_RTC
P147	VDD_IN	VDD_IN	S148	LID#	N/A
P148	VDD_IN	VDD_IN	S149	SLEEP#	N/A
P149	VDD_IN	VDD_IN	S150	VIN_PWR_BAD#	VCC_EXT_5V0_EN
P150	VDD_IN	VDD_IN	S151	CHARGING#	CHARGING#
P151	VDD_IN	VDD_IN	S152	CHARGER_PRSN#	CHARGER_PRSN#
P152	VDD_IN	VDD_IN	S153	CARRIER_STBY#	CARRIER_STBY#
P153	VDD_IN	VDD_IN	S154	CARRIER_PWR_ON	CARRIER_PWR_ON
P154	VDD_IN	VDD_IN	S155	FORCE_RECOV#	FORCE_RECOV#
P155	VDD_IN	VDD_IN	S156	BATLOW#	BATLOW#
P156	VDD_IN	VDD_IN	S157	TEST#	N/A
			S158	GND	GND



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