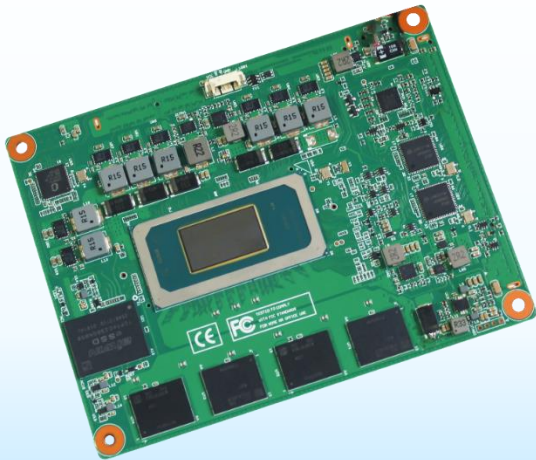


RXE-8200 series

Product Features

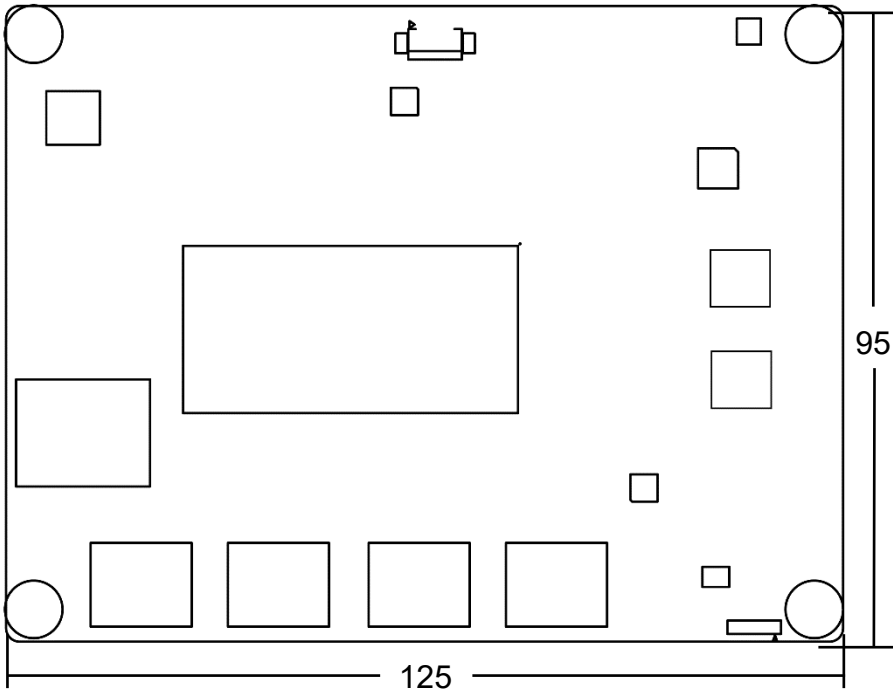
- Intel® Core™ Ultra 3 Series Processors
- 16G/32G LPDDR5X, On board 256G SSD
- 2 x GbE LAN (Intel® Ethernet Controller I210-AT)
- 1x USB2.0 Header
- 9-36V DC-in
- 125 x 95 x 1.6 mm(L x W x H)
- Windows 10/11, Ubuntu 20.04/22.04



Specification

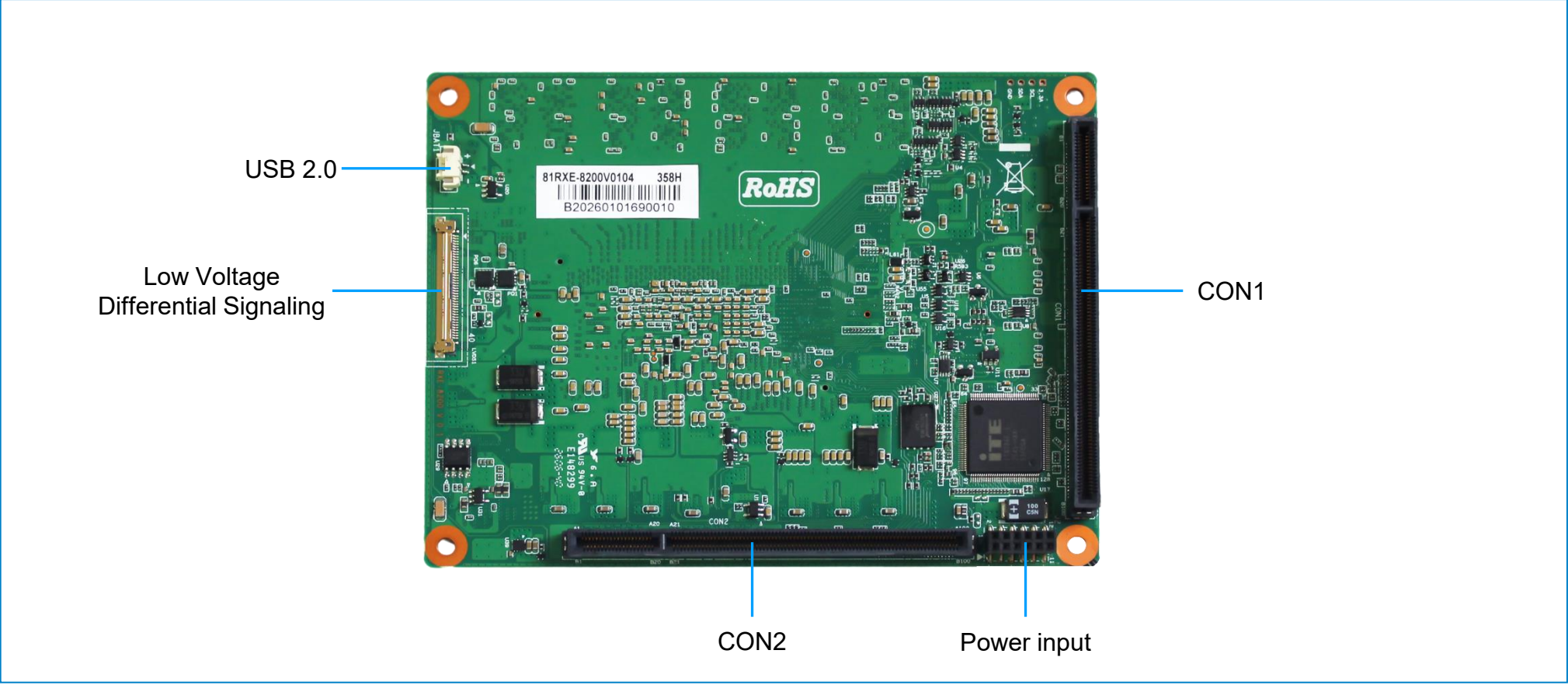
Attribute		Describe
Processor system	CPU	Intel® Core™ Ultra 3 Series Processors
	Basic power consumption	25W
	BIOS	AMI 256Mbit SPI Flash
Memory	Technology	4 x LPDDR5X
	Capacity	Single slot 16GB/32GB, up to 64GB
Storage	SSD	On board 256G SSD
Internal API	USB	1 X USB2.0 (Built-in)
	RTC Battery	1 x RTC Battery (CR2032)
	Low Voltage Differential Signaling	1 x eDP1.4b resolution up to 4096 x 2304 @ 60Hz; or LVDS single channel 18/24-bit, resolution up to 1920x1200
	BTB connector	1 x CON1, 1 x CON2 (200pin high-speed signal connector)
	Power input	1 power supply interface, 9-36V±10% DC
Other	Watchdog	65536 lever, 0~65535 sec
Environmental parameters	Operating temperature	0 ~ 60 °C (32~140°F)
	Storage temperature	-40~85 °C (-40~185°F)
	Work humidity	95% @ 40 °C(Non-Condensing)
	Storage humidity	95% @ 60 °C(Non-Condensing)
Physical characteristics	Size	125 x 95 x mm(L x W)
Operating system	Operating System	Windows 10/11, CentOS 8, Ubuntu 20.04/22.04

Dimension



RXE-8200 series

Interface



Ordering Information

Part Number	CPU	Processor Base Power	Max. Frequency	Core	Thread	Gigabit Ethernet	DC Input
RXE-8200-01	356H	25W	4.7 GHz	16	16	2	9-36V DC
RXE-8200-02	358H	25W	4.8 GHz	16	16	2	9-36V DC
RXE-8200-03	366H	25W	4.8 GHz	16	16	2	9-36V DC
RXE-8200-04	368H	25W	5.0 GHz	16	16	2	9-36V DC
RXE-8200-05	378H	25W	5.0 GHz	16	16	2	9-36V DC
RXE-8200-06	386H	25W	4.9 GHz	16	16	2	9-36V DC
RXE-8200-07	388H	25W	5.1 GHz	16	16	2	9-36V DC
RXE-8200-08	336H	25W	4.6 GHz	12	12	2	9-36V DC
RXE-8200-09	338H	25W	4.7 GHz	12	12	2	9-36V DC
RXE-8200-10	325	25W	4.5 GHz	8	8	2	9-36V DC
RXE-8200-11	335	25W	4.6 GHz	8	8	2	9-36V DC
RXE-8200-12	355	25W	4.7 GHz	8	8	2	9-36V DC
RXE-8200-13	365	25W	4.8 GHz	8	8	2	9-36V DC
RXE-8200-14	322	25W	4.4 GHz	6	6	2	9-36V DC

RXE-8200 series

USB 2.0 pin definition

PIN	Signal	PIN	Signal
1	VCC	4	GND
2	D-	5	GND
3	D+		

Power connector Pinout definition

PIN	Signal	PIN	Signal
1	+V12A	7	GND
2	+V12A	8	GND
3	+V12A	9	GND
4	+V12A	10	GND
5	+V12A	11	GND
6	+V12A	12	GND

LVDS pin definition

PIN	Signal	PIN	Signal
1	12V	21	B_DATA1P
2	12V	22	B_DATA1N
3	12V	23	GND
4	12V	24	B_DATA0P
5	BL_PWM	25	B_DATA0N
6	BL_EN	26	GND
7	GND	27	A_CLK1P/EDP_AUXP
8	GND	28	A_CLK1N/EDP_AUXN
9	LCD_VCC3	29	GND
10	LCD_VCC3	30	A_DATA3P
11	HDP	31	A_DATA3N
12	B_CLK1P	32	GND
13	B_CLK1N	33	A_DATA2P/EDP_DATA0P
14	GND	34	A_DATA2N/ EDP_DATA0N
15	B_DATA3P	35	GND
16	B_DATA3N	36	A_DATA1P/EDP_DATA1P
17	GND	37	A_DATA1N/EDP_DATA0P
18	B_DATA2P	38	GND
19	B_DATA2N	39	A_DATA0P
20	GND	40	A_DATA0N

RXE-8200 series

BTB CON1 Pin Definition

PIN	Signal	PIN	Signal	PIN	Signal	PIN	Signal
A1	GND	A51	HDA_BCLK_R	B1	GND	B51	GND
A2	PCle_CLKP3	A52	HDA_SDO_ME	B2	PCIE_CLKP7	B-52	LAN1_3N
A3	PCle CLKN3	A53	GND	B3	PCle CLKN7	B53	LAN1_3P
A4	GND	A54	LAN1_LED2	B4	GND	B54	GND
A5	PCIE_CLKP5	A55	LAN1_LED0	B5	PCle_B2_RXN	B55	LAN1_2N
A6	PCIE_CLKN5	A56	LAN1_LED1	B6	PCle_B2_RXP	B56	LAN1_2P
A7	GND	A57	GND	B7	GND	B57	GND
A8	PCle_CLKP4	A58	SRCCLKREQ7#	B8	PCle_B1_TXP	B58	LAN1_1N
A9	PCle CLKN4	A59	GND	B9	PCle_B1_TXN	B59	LAN1_1P
A10	GND	A60	USB_PN7	B10	GND	B60	GND
A11	PCle_B1_RXN	A61	USB_PP7	B11	PCle_B2_TXP	B61	LAN1_0N
A12	PCle_B1_RXP	A62	GND	B12	PCle_B2_TXN	B62	LAN1_0P
A13	GND	A63	USB_PP6	B13	GND	B63	GND
A14	PCIE_C4_TXP	A64	USB_PN6	B14	PCle_C2_TXN	B64	B2B_ESPI_CS1
A15	PCle_C4_TXN	A65	GND	B15	PCle_C2_TXP	B65	B2B_ESPI_CLK
A16	GND	A66	USB_PN5	B16	GND	B66	B2B_ESPI_RESET#
A17	PCle_C3_TXN	A67	USB_PP5	B17	PCle_C1_TXN	B67	B2B_ESPI_AD3
A18	PCle_C3_TXP	A68	GND	B18	PCle_C1_TXP	B68	B2B_ESPI_AD2
A19	GND	A69	USB_PN1	B19	GND	B69	B2B_ESPI_AD1
A20	Auto Power	A70	USB_PP1	B20	POWERSW	B70	B2B_ESPI_AD0
A21	SOC_SML0_CLK	A71	GND	B21	SRCCLKREQ5#	B71	B2B_ESPI_CS0
A22	SOC_SML0_DATA	A72	USB_PN3	B22	SRCCLKREQ4#	B72	GND
A23	GND	A73	USB_PP3	B23	SRCCLKREQ3#	B73	USB3TP1
A24	GND	A74	GND	B24	GND	B74	USB3TN1
A25	PCle_C4_RXN	A75	USB3RP2	B25	SOC_WAKE#LAN_PHYI219	B75	GND
A26	PCle_C4_RXP	A76	USB3RN2	B26	LAN2_LED2	B76	USB3RP1
A27	GND	A77	GND	B27	LAN2_LED0	B77	USB3RN1
A28	PCle_C3_RXN	A78	USB_PN4	B28	LAN2_LED1	B78	GND
A29	PCle_C3_RXP	A79	USB_PP4	B29	SOC_LANPHYPC	B79	USB3TN2
A30	GND	A80	GND	B30	SOC_SUSCLK	B80	USB3TP2
A31	PCle_C2_RXN	A81	USB_PN2	B31	GND	B81	GND
A32	PCle_C2_RXP	A82	USB_PP2	B32	LAN2_3N	B82	SINB
A33	GND	A83	GND	B33	LAN2_3P	B83	SOUTB
A34	PCle_C1_RXN	A84	TCP3_TXRX1_P	B34	GND	B84	DSRB
A35	PCle_C1_RXP	A85	TCP3_TXRX1_N	B35	LAN2_2N	B85	RTSB_
A36	GND	A86	GND	B36	LAN2_2P	B86	DTRB_
A37	TCP3_CTRLDATA	A87	TCP3_TXRX0_P	B37	GND	B87	CTSB_
A38	TCP3_CTRLCLK	A88	TCP3_TXRX0_N	B38	LAN2_1N	B88	RIB_
A39	TCP3_TBT_LSX0_OE	A89	GND	B39	LAN2_1P	B89	DCDB_
A40	GND	A90	TCP3_AUX_N	B40	GND	B90	SIO_GP36
A41	Clear CMOS	A91	TCP3_AUX_P	B41	LAN2_0N	B91	SIO_GP81
A42	GPP_F5_CRF_CLKREQ	A92	GND	B42	LAN2_0P	B92	SIO_GP85
A43	GPP_F4_CNV_RF_RESET_N	A93	TCP3_TX0_P	B43	GND	B93	SIO_GP87
A44	GPP_F6_CNV_PA_BLANKING	A94	TCP3_TX0_N	B44	PCle_WAKE#	B94	PWM_BL_B2B
A45	GPP_F0_CNV_BRI_DT_UART2_RTS_N	A95	GND	B45	SMB_DATA	B95	LCD_BKL_ON_B2B
A46	GPP_F1_CNV_BRI_RSP_UART2_RXD	A96	TCP3_TX1_P	B46	SMB_CLK	B96	SOC_SLP_S3_N_R
A47	SOC_SLP_S4_N_R	A97	TCP3_TX1_N	B47	PLTRST#	B97	PLED
A48	GND	A98	GND	B48	KEYB_FCP_OFF_N	B98	HDD_LED
A49	HDA_SYNC	A99	NC	B49	KEYB_DISABLE_N	B99	NC
A50	HDA_SDI0_R	A100	+V1P8S	B50	HDA_RSTN_R	B100	+V1P8A

RXE-8200 series

BTB CON2 Pin Definition

PIN	Signal	PIN	Signal	PIN	Signal	PIN	Signal
A1	TCP1_TXRX0_N	A51	GND	B1	PCle_CLKP8	B51	CNV_WT_LANE0_DP
A2	TCP1_TXRX0_P	A52	GPP_F2_CNV_RGI_DT_UART2_TXD	B2	PCle CLKN8	B-52	CNV_WT_LANE0_DN
A3	GND	A53	GPP_F3_CNV_RGI_RSP_UART2_CTS_N	B3	GND	B53	GND
A4	TCP1_TX1_N	A54	GPP_CAM1_RST_N	B4	PCle CLKN2	B54	CNV_WT_CLK_DP
A5	TCP1_TX1_P	A55	GPP_CAM1_FLSH_STROBE	B5	PCle_CLKP2	B55	CNV_WT_CLK_DN
A6	GND	A56	CRD1_PWREN	B6	GND	B56	GND
A7	TCP1_TX0_N	A57	SECURE_CAMERA_SWITCH_RIGHT	B7	TCP1_TXRX1_N	B57	CNV_WT_LANE1_DP
A8	TCP1_TX0_P	A58	GND	B8	TCP1_TXRX1_P	B58	CNV_WT_LANE1_DN
A9	GND	A59	TCP1_CTRLDATA	B9	GND	B59	GND
A10	TCP0_TXRX1_P	A60	TCP1_CTRLCLK	B10	TCP1_AUX_N	B60	ISH_I2C0_SDA
A11	TCP0_TXRX1_N	A61	TCP2_CTRLDATA	B11	TCP1_AUX_P	B61	ISH_I2C0_SCL
A12	GND	A62	TCP2_CTRLCLK	B12	GND	B62	ISH_I2C1_SDA
A13	CSI_C_D0_DP	A63	TCP0_CTRLCLK	B13	TCP0_TX1_P	B63	ISH_I2C1_SCL
A14	CSI_C_D0_DN	A64	TCP0_CTRLDATA	B14	TCP0_TX1_N	B64	GND
A15	GND	A65	TCP2_TBT_LSX0_OE	B15	GND	B65	SIO_GP84
A16	CSI_C_CK_DP	A66	GND	B16	TCP0_TXRX0_P	B66	SIO_GP83
A17	CSI_C_CK_DN	A67	GPP_F7_IMGCLKOUT_2	B17	TCP0_TXRX0_N	B67	SIO_GP82
A18	GND	A68	GPP_PRIVACY_LED_CAM1_CVS_HST_WAKE	B18	GND	B68	SIO_GP80
A19	CSI_C_D1_DN	A69	ISH_INT_GP_CVS	B19	TCP0_TX0_P	B69	SIO_GP86
A20	CSI_C_D1_DP	A70	GPP_CAM1_CLK_EN	B20	TCP0_TX0_N	B70	SIO_GP70
A21	CSI_B_D0_A_D2_DN	A71	GND	B21	GND	B71	SIO_GP71
A22	CSI_B_D0_A_D2_DP	A72	RTSF_	B22	TCP0_AUX_P	B72	SIO_GP72
A23	GND	A73	DCDA_	B23	TCP0_AUX_N	B73	SIO_GP77
A24	CSI_B_CK_DN	A74	CTSA	B24	TCP2_AUX_P	B74	SIO_GP76
A25	CSI_B_CK_DP	A75	DSRA_	B25	TCP2_AUX_N	B75	SIO_GP75
A26	GND	A76	Sina	B26	GND	B76	SIO_GP74
A27	CSI_B_D1_A_D3_DN	A77	CTSF_	B27	TCP2_TXRX0_P	B77	SIO_GP73
A28	CSI_B_D1_A_D3_DP	A78	SOUTF	B28	TCP2_TXRX0_N	B78	CPUFAN_CTL
A29	GND	A79	RIA_	B29	GND	B79	CPUFAN_TAC
A30	TCP2_TX1_P	A80	DTRA_	B30	TCP2_TX0_P	B80	CTSC_
A31	TCP2_TX1_N	A81	RTSA_	B31	TCP2_TX0_N	B81	RTSC_
A32	GND	A82	GND	B32	GND	B82	SOUTC
A33	CSI_A_D1_DP	A83	SOUTA	B33	TCP2_TXRX1_P	B83	SINC
A34	CSI_A_D1_DN	A84	SPI0_CS_TPM	B34	TCP2_TXRX1_N	B84	SINF
A35	GND	A85	SPI0_CLK_TPM	B35	GND	B85	CTSE
A36	CSI_A_CK_DP	A86	SPI0_MOSI_TPM	B36	PCle_A3_TXP	B86	Sine
A37	CSI_A_CK_DN	A87	GND	B37	PCle_A3_TXN	B87	SOUTE
A38	GND	A88	SPI0_MISO_TPM	B38	GND	B88	CTSD_
A39	CSI_A_D0_DP	A89	GPP_D4_IMGCLKOUT_0	B39	PCle_A4_TXP	B89	RTSD_
A40	CSI_A_D0_DN	A90	GPP_D0_IMGCLKOUT_1	B40	PCle_A4_TXN	B90	SIND
A41	GND	A91	TCP1_HPD	B41	GND	B91	RTSE_
A42	CNV_WR_LANE1_DP	A92	SIO_GP60	B42	PCle_A3_RXP	B92	SOUTD
A43	CNV_WR_LANE1_DN	A93	SOC_CNV_MFUART2_TXD	B43	PCle_A3_RXN	B93	ISH_I2C2_SCL
A44	GND	A94	GPP_B24_KEYB_RST_N	B44	GND	B94	ISH_I2C2_SDA
A45	CNV_WR_CLK_DP	A95	GPP_B22_TIME_SYNC0_ISH_GP_5	B45	PCIE_A4_RXP	B95	SOC_CNV_MFUART2_RXD
A46	CNV_WR_CLK_DN	A96	FP_RST	B46	PCle_A4_RXN	B96	TCP3_HPD_USBOC2#
A47	GND	A97	TCP2_HPD_USBOC1#	B47	GND	B97	TCP0_HPD
A48	MLK_CLK	A98	GPP_B23_TIME_SYNC1_ISH_GP_6	B48	CNV_WR_LANE0_DP	B98	GPP_A16_BT_RF_KILL_N
A49	MLK_RST_N	A99	GND	B49	CNV_WR_LANE0_DN	B99	GPP_A17_WIFI_KILL_N
A50	MLK_DATA	A100	GND	B50	GND	B100	SRCCLKREQ2#