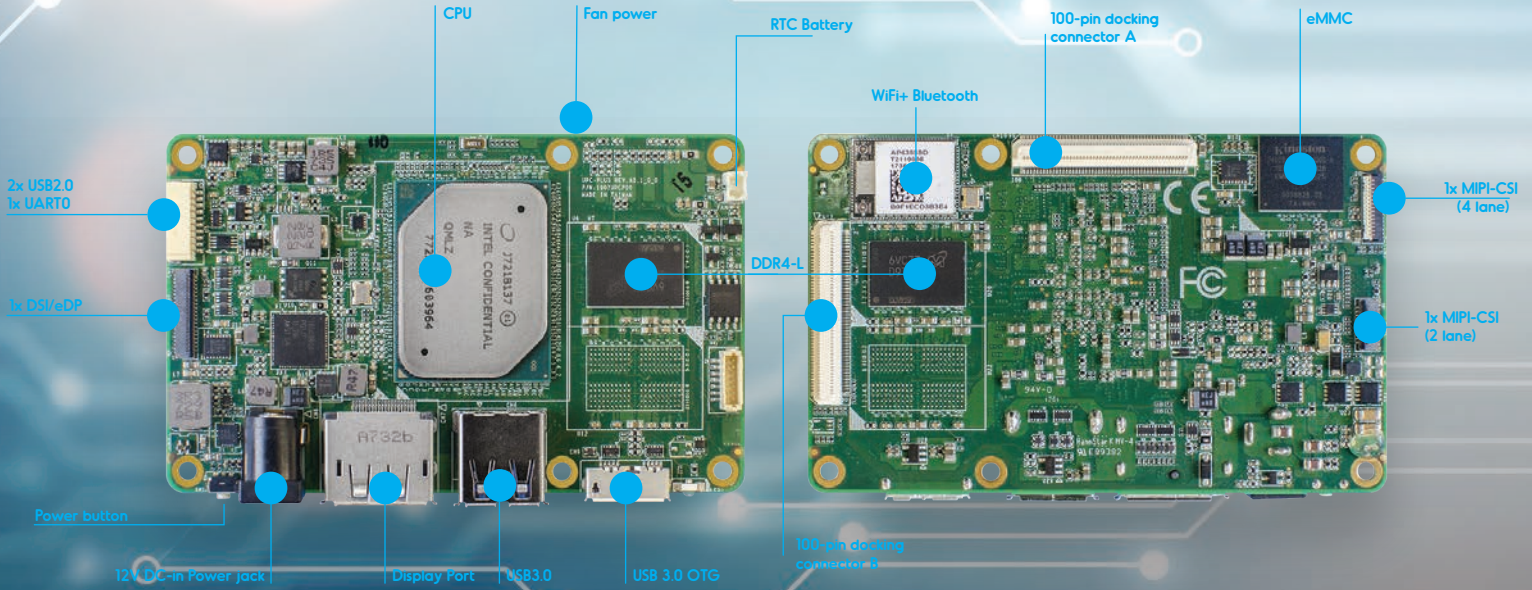


bridge the gap



UP Core Plus is a credit card-sized board with high performance and low power consumption which features of the latest the Intel® Atom™ x5 / x7 / Celeron / Pentium processor 64 bits up to 2.5 GHz.

The internal GPU is the latest Intel Gen 9 HD 500 with up to 18 Execution Units up to 650MHz to deliver extremely high 3D graphic performance.


















UP Core Plus is equipped with 2GB/4GB/8GB DDR4L RAM at 2400 MHz and 32GB/64GB/128 eMMC. On board there are a wide variety of features and I/O including USB 3.0 Host + OTG, UART on USB header, WiFi, Bluetooth, DSI, MIPI-CSI, Display Port 4K and more!

On the bottom of the board 2 x 100-pin high speed docking connectors provide the freedom to users to design their carrier board. The pin definition of 100-pin connector A is fully compatible with UP Core.

It's UP to you to choose which operation system is best for your application. The CPU is supported by Microsoft Windows 10 Professional and IoT Core and you can download Linux Ubuntu, Linux Debian, Linux Yocto, Android 6.0 through our UP Community.

UP Core Plus is available at industrial temperature range which makes it perfect for industrial application in harsh environment.

UP Core Plus - Specifications

      	<p>SOC Intel® Atom™ x5-E3940 (2M Cache, up to 2.00 GHz) Intel® Atom™ x7-E3950 (2M Cache, up to 2.00 GHz) Intel® Celeron® N3350 (2M Cache, up to 2.50 GHz) Intel® Pentium® N4200 (2M Cache, up to 2.50 GHz)</p> <p>Graphics Intel® HD 500 Graphics</p> <p>Memory 2GB / 4GB / 8GB onboard DDR4L-2400</p> <p>Storage Capacity 32GB / 64 GB / 128 GB eMMC</p> <p>Video & Audio 1x DP 4K 60Hz 1x Full eDP Audio via DP and I2S (from Docking)</p> <p>Camera interface 1x MIPI-CSI 2 lane 1x MIPI-CSI 4 lane</p> <p>Operating humidity 10%~80%RH non-condensing</p> <p>Operating Temperature 32-140°F / 0~60°C xx-xx°F / -40~85°C</p>	         	<p>USB 1x USB 3.0 Host 1x USB 3.0 OTG 2x USB 2.0 pin header</p> <p>WiFi / BT WiFi 802.11 AC 2T2R Bluetooth 4.2 (BLE)</p> <p>Expansion 2x Docking Connector 100 pin including: USB 2.0, USB 3.0, 6 PCI-E Lane, SATA, I2C, I2S, SPI, PWM, LPC, SDIO, HSUART, ISH, GPIO</p> <p>Compatible Operating system Microsoft Windows 10 Professional, Microsoft Windows 10, IoT Core, Linux (Ubuntu, Yocto), Android Marshmallow</p> <p>Power 12V DC-in @ 4A -6A 5.5/2.1mm jack</p> <p>Dimensions 56.50 mm x 90 mm</p> <p>Certificate CE/FCC Class A, RED, RoHS complaint, REACH</p>
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UP Core Plus - 100-pin Connector A

1	5V	21	GND	41	LPC_R_AD3	61	PCIE_P5_USB3_P2_RXP	81	I2C_SCL1
2	5V	22	CPU_prog_JTAG_TDO	42	ISH_GPIO_5	62	GND	82	ISH_GPIO_11
3	5V	23	SIO_SPI_0_TXD	43	GND	63	PCIE_P5_USB3_P2_RXN	83	GND
4	5V	24	CPU_prog_JTAG_TMS	44	ISH_GPIO_6	64	USB2_DP2	84	ISH_GPIO_12
5	5V	25	SIO_SPI_0_RXD	45	AVS_I2S2_MCLK	65	GND	85	I2C_SDA5
6	5V	26	HDMI1_CEC_D	46	PWM0	66	USB2_DN2	86	ISH_GPIO_13
7	5V	27	SIO_SPI_0_CLK	47	AVS_I2S2_WS_SYNC	67	PCIE_REFCLK3_P	87	I2C_SCL5
8	5V	28	CPU_prog_JTAG_TCK	48	PWM1	68	GND	88	ISH_GPIO_14
9	GND	29	SIO_SPI_0_FS0	49	AVS_I2S2_SDI	69	PCIE_REFCLK3_N	89	GND
10	GND	30	CPU_prog_JTAG_TDI	50	GND	70	nSTATUS	90	PMIC_IRQ_N
11	PMU_RSTBTN_N	31	SIO_SPI_0_FS1	51	AVS_I2S2_SDO	71	GND	91	LPC_FRAME_R
12	LPSS_UART1_RTS	32	ISH_GPIO_0	52	I2C_SDA6	72	GND	92	FPGA_CLR
13	PMU_PWRBTN_N	33	GND	53	GND	73	I2C_SDA0	93	LPC_R_CLKOUT0
14	LPSS_UART1_CTS	34	ISH_GPIO_1	54	I2C_SCL6	74	ISH_GPIO_7	94	GND
15	PM_SLP_S3#_3P3	35	LPC_R_AD0	55	PCIE_P5_USB3_P2_TXP	75	I2C_SCL0	95	LPC_CLKRU_N
16	LPSS_UART1_TXD	36	ISH_GPIO_2	56	GND	76	ISH_GPIO_8	96	FPGA_RST
17	PCIE_CLKREQ3#	37	LPC_R_AD1	57	PCIE_P5_USB3_P2_TXN	77	GND	97	INT_SERIRQ_R
18	LPSS_UART1_RXD	38	ISH_GPIO_3	58	AVS_I2S2_BCLK	78	ISH_GPIO_9	98	FPGA_OE
19	PCIE_WAKE3_N	39	LPC_R_AD2	59	GND	79	I2C_SDA1	99	CONFIG_SEL
20	GND	40	ISH_GPIO_4	60	BT_HOST_WAKE	80	ISH_GPIO_10	100	FPGA_fw_reload

UP Core Plus - 100-pin Connector B

1	+12V	21	DDIO_TXN_2	41	GND	61	PCIE_RXP2	81	USB2_DN3
2	+12V	22	DDIO_TXN_3	42	GND	62	SATA_P1_USB3_P5_RXN	82	SATA_TXN0
3	+12V	23	GND	43	PCIE_TXP0	63	PCIE_RXN2	83	GND
4	+12V	24	GND	44	PCIE_TXP1	64	SATA_P1_USB3_P5_RXP	84	GND
5	+12V	25	DDIO_AUXP	45	PCIE_TXN0	65	GND	85	USB2_DP4
6	+12V	26	DDIO_DDCCCLK	46	PCIE_TXN1	66	GND	86	USB2_DP5
7	+12V	27	DDIO_AUXN	47	GND	67	PCIE_P4_USB3_P3_TXP	87	USB2_DN4
8	+12V	28	DDIO_DDCCDATA	48	GND	68	SATA_P1_USB3_P5_TXN	88	USB2_DN5
9	DDIO_HPD	29	GND	49	PCIE_REFCLK2_P	69	PCIE_P4_USB3_P3_TXN	89	GND
10	PM_SLP_S3#_3P3	30	GND	50	PCIE_P3_USB3_P4_TXP	70	SATA_P1_USB3_P5_TXP	90	GND
11	GND	31	PCIE_REFCLK0_P	51	PCIE_REFCLK2_N	71	GND	91	PWRON_PNLVDDEN
12	GND	32	PCIE_REFCLK1_P	52	PCIE_P3_USB3_P4_TXN	72	GND	92	SATA_LED_N
13	DDIO_TXP_1	33	PCIE_REFCLK0_N	53	GND	73	PCIE_P4_USB3_P3_RXP	93	PLTRST_PNLBKLEN
14	DDIO_TXP_0	34	PCIE_REFCLK1_N	54	GND	74	SATA_RXN0	94	DDIO_BKLTCTL
15	DDIO_TXN_1	35	GND	55	PCIE_TXP2	75	PCIE_P4_USB3_P3_RXN	95	PCIE_WAKE0_N
16	DDIO_TXN_0	36	GND	56	PCIE_P3_USB3_P4_RXP	76	SATA_RXP0	96	PCIE_CLKREQ0#
17	GND	37	PCIE_RXP0	57	PCIE_TXN2	77	GND	97	PCIE_WAKE1_N
18	GND	38	PCIE_RXP1	58	PCIE_P3_USB3_P4_RXN	78	GND	98	PCIE_CLKREQ1#
19	DDIO_TXP_2	39	PCIE_RXN0	59	GND	79	USB2_DP3	99	PCIE_WAKE2_N
20	DDIO_TXP_3	40	PCIE_RXN1	60	GND	80	SATA_TXP0	100	PCIE_CLKREQ2#

Important notice: UP Core Plus is still in development and all specifications, features and data are subject to change.

Part number :
Coming soon