

# UBC-220

## NXP ARM® Cortex®-A9 i.MX6 2.5" IoT Gateway



### Features

- NXP ARM® Cortex®-A9 i.MX6 Dual Lite 1 GHz processor
- Onboard DDR3 1GB, 800MHz
- 4 GB eMMC Flash Memory
- Dual display HDMI 1920x1080P and single channel 18/24 bit LVDS
- Rich I/O with 1 4-wire RS-232, 1 USB 2.0, 1 USB OTG
- Dual mini-PCIe slots for Wi-Fi/Cellular module support
- Low power consumption, fanless design
- Supports wall mounting, 10x10 VESA and DIN rails

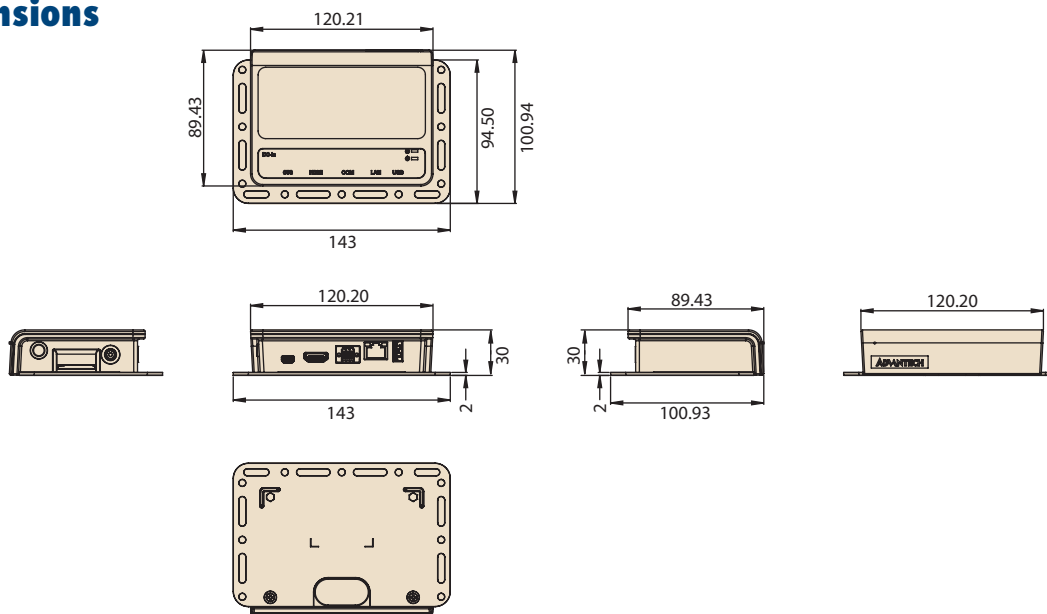


### Specifications

Form Factor		2.5"Box computer
Processor System	CPU	NXP ARM® Cortex®-A9 i.MX6 dual-core lite 1 GHz processor
	Technology	DDR3 800 MHz
Memory	Capacity	1 GB of onboard DDR3
	Flash	4 GB of eMMC Flash for OS and 4 MB of NOR Flash for Advantech's boot loader
Graphics	HDMI	HDMI with 1920 x 1080 resolution
	LVDS	Single-channel 18/24-bit LVDS
	Graphics Engine	1 x IPU. OpenGL ES 2.0 for 3D, BitBit for 2D and OpenVG 1.1
	H/W Video Codec	Decoder: MPEG-4 ASP, H.264 HP, H.263, MPEG-2 MP, MJPEG BP Encoder: MPEG-4 SP, H.264 BP, H.263, MJPEG BP
Ethernet	Chipset	NXP i.MX6 integrated RGMII
	Speed	1 10/100/1000 Mbps
Watchdog Timer	Watchdog Timer	From 1~6553s, power on/off 4s
I/O	USB	1 x USB 2.0 Type A
	USB OTG	1 x USB 2.0 OTG
	UART	1 x 4-wire RS-232
Indicator	LED	1 x Green LED for system power
		1 x Green LED (user defined)
Expansion	Full-Size Mini PCIe	1 (with USB signal only)
	Half-Size Mini PCIe	1 (with USB & PCIe signal)
	SD Socket	1
	SIM	1
	Antenna Socket	1
Power	Power Supply Voltage	12 V <sub>DC</sub>
	Power Type	DC-in
	Power Consumption	4.4 Watts (max. load)
Environment	Operating Temperature	0 - 60 °C
	Operating Humidity	5 - 95% relative humidity, non-condensing
Mechanical	Dimensions	142 x 101 x 30 mm
	Mounting	Wall mount, DIN rail, VESA mount
	Weight	210 g
Operating System	Linux	Yocto 2.1 (Kernel 4.1.15)
	Android	Android 6.0.1
Certifications		CE/FCC Class B

## Dimensions

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Flash	HDMI	VGA	LVDS	LAN	Serial Port	USB Host	SD	Software	Operating Temperature
UBC-220DL-MDA1E	NXP i.MX6 dual-core lite, 1 GHz	1 GB	4 GB	1	-	1	1	1 x 4-wire RS-232	1 USB 2.0 1 OTG	1	Linux Android	0 ~ 60 °C

## Packing List

Part Number	Description
1652006794-01	6-pin terminal block

## Optional Accessories

Part Number	Description
96PSA-A36W12R1	Power Adapter 100-240V 36W 12V
1700001524	Power cord 3P UL 180cm
170203183C	Power cord 3P EU 183cm
170203180A	Power cord 3P UK 183cm
1700008921	Power Cord 3P PSE 183cm
1700028000-01	Power Cord PSE 2P(F)+SW-TEM/3P(M) 7A 125V 183cm
EWM-W142H01E	802.11 b/g/n, AR9287, 2T2R, Half size Mini PCIe
EWM-C106FT02E	HSPA/WCDMA/GPRS cellular module
1750006043	Cable R/P SMA (M) to MHF 1.32 150 mm (Wi-Fi cable)
1750000318	EMI antenna 2DBI 2.4 GHz SMA CONN for ARK-3384 (Wi-Fi antenna)
1750006264	Antenna SMA(F)/MHF 15 cm SMALFN8-3150A-00X00R (3G cable)
1750005865	Antenna, 10.9 cm, 50 ohm, AN8921F-5701SM (3G antenna)
1700021565-01	Debug cable
SQF-ISDS1-2G-86E	SQFlash SD card SLC 2G (-40 ~ 85 °C)
EBC-RS03DINRAILKIT	ASS'Y Din Rail Kit for Boss mini EBC-RS03

## External I/O

