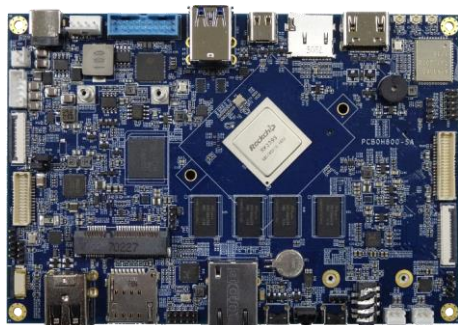


# SBC3100 (Cortex-A72) Single Board Computer

Ultra High Performance SBC with RK3399  
(Cortex-A72 x2 + Cortex-A53 x4) @ 2Ghz



**SBC3100**



**EC3100**

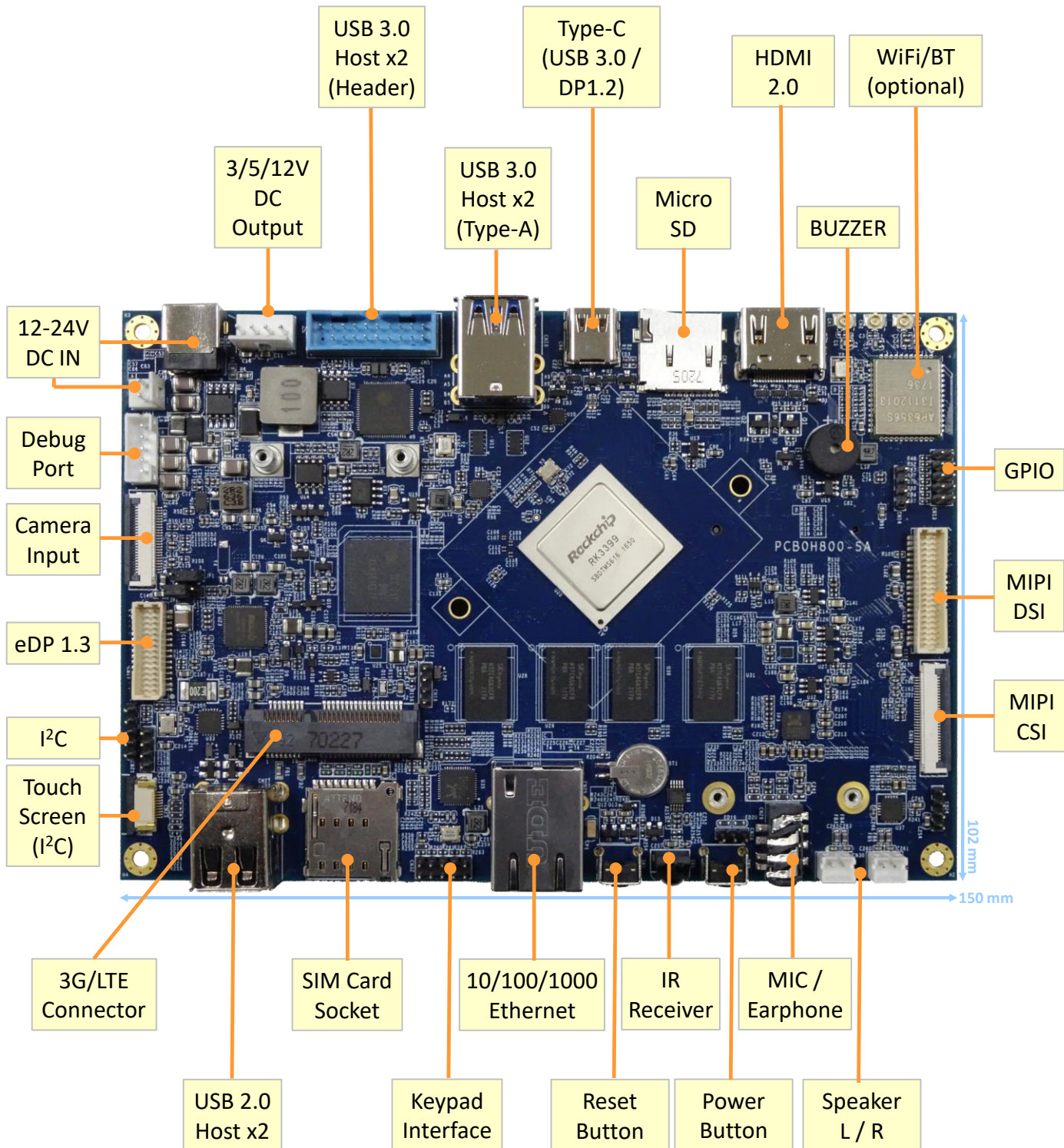
- *SBC3100: Single Board Computer*
- *EC3100: Embedded Computer*
- *H310: HDMI Input (receiver) Module*
- *H330: LVDS Output (display) Module*
- *D120: 4xCOM Port Module (Isolated)*

## Typical Applications

- ❑ Digital signage
- ❑ Thin Client
- ❑ POS (Point of sale)
- ❑ Set Top Box
- ❑ Gaming devices

# SBC3100 (Dual ARM Cortex-A72)

## I/O and Functions:



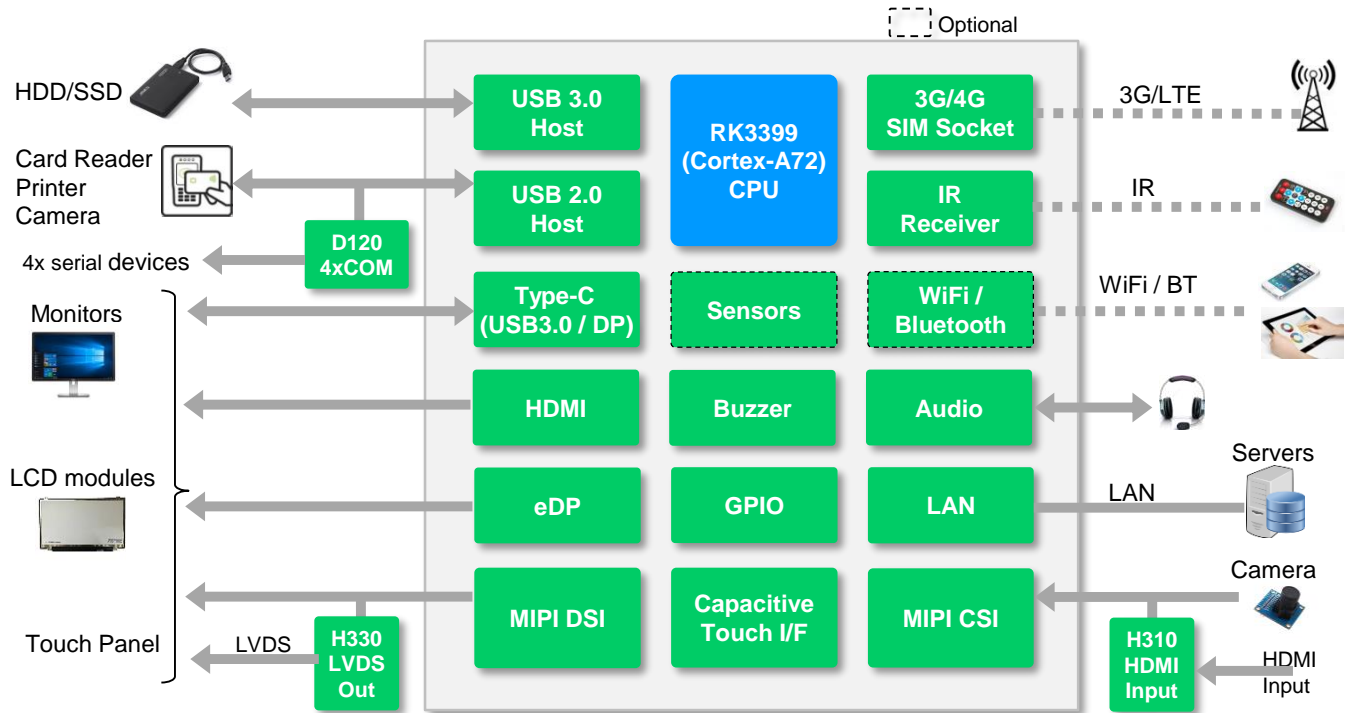
# SBC3100 (Dual ARM Cortex-A72)

## Specifications:

	<b>SBC3100</b>
<b>CPU</b>	Rockchip RK3399 (2x ARM Cortex-A72 + 4x ARM Cortex-A53)
<b>OS</b>	Android 7.0 / Ubuntu 16.04 / Debian
<b>DDR RAM</b>	1GB / 2GB / 4GB
<b>Flash ROM</b>	8GB / 16GB
<b>Display Interface</b>	1x HDMI 2.0 (4Kx2K @60fps)
	1x DisplayPort 1.2 (4Kx2K @60fps)
	1x eDP 1.3 (2560x1600 @60fps)
	MIPI-DSI (2560x1600 @60fps)
<b>MIPI</b>	1x CSI + 1x DSI + 1x (CSI or DSI)
<b>Touch Interface</b>	1x Capacitive Touch Screen Interface (I <sup>2</sup> C)
<b>Audio Interface</b>	1x mic/earphone combo connector + 2x speaker connector
<b>USB 2.0 Host</b>	2x USB 2.0 type-A + 1x USB 2.0 pin header
<b>USB 3.0 Host</b>	2x USB 3.0 type-A + 2x USB 3.0 pin header
<b>Type-C</b>	USB 3.0 OTG / DisplayPort 1.2
<b>SD Card slot</b>	1x microSD
<b>Ethernet</b>	1x 10/100/1000 Mbps (RJ-45)
<b>WiFi/BT (optional)</b>	WiFi 802.11 b/g/n/ac + Bluetooth 4.1
<b>3G/LTE Modem</b>	3G/LTE socket (mPCIe form factor) + microSIM socket
<b>Sensor (optional)</b>	3-axis Accelerometer + 3-axis Gyroscope
<b>Buzzer</b>	1x Buzzer
<b>GPIO</b>	8-bit input/output
<b>miniPCIe</b>	1x MiniPCI-e socket
<b>Console port</b>	1x UART (console / debug)
<b>I<sup>2</sup>C port</b>	1x I <sup>2</sup> C master port
<b>IR</b>	1x IR receiver
<b>Power Input</b>	DC 12V - 24V
<b>Dimension</b>	102 x 150 x 2.6 mm
<b>Weight</b>	129g (including heatsink)
<b>Environment</b>	<TBD>

# SBC3100 (Dual ARM Cortex-A72)

## Block Diagram



## SBC3100 Ordering Information

(\*\* Note: Not all models are available now. Contact us for any custom requirements.)

Part No.	OS	RAM	Flash	USB Host	G-sensor	Common Specifications
SBC3100-U-2G	Ubuntu	2GB DDR3	8GB	USB2.0 USB3.0	NO	RK3399 CPU USB3.0 Type-C / eDP / MIPI / HDMI Touch interfaces (capacitive) Audio/ LAN / GPIO MicroSD / mPCIe socket 3G/LTE socket / Buzzer
SBC3100-A-2G	Android					
SBC3100-U-4G	Ubuntu	4GB DDR3	8GB	USB2.0 USB3.0	Yes	
SBC3100-A-4G	Android					

## Optional Products:

(\*\* Note: Not all models are available now. Contact us for any custom requirements.)

Part No.	Description
PWR-007-SBC	Power Adapter (+12V) + power cord
D120-SE	4x RS232/RS422/RS485 card with isolation
H330	LVDS Display I/F + MIPI cable + LVDS cable

Part No.	Description
H310	HDMI Input (Receiver) Module
LTE module	(Contact us for support list)
3G module	(Contact us for support list)

# EC3100 (Dual ARM Cortex-A72)

- EC3100 is a SBC3100 with aluminum enclosure
- Dimension: 179 x 105 x 33.2 mm (not including antenna jack)



## EC3100 Ordering Information

(\*\* Note: Not all models are available now. Contact us for any custom requirements.)

Part No.	OS	RAM	Flash	USB Host	G-sensor	Common Specifications
EC3100-U-2G	Ubuntu	2GB DDR3	8GB	USB2.0 USB3.0	<b>NO</b>	RK3399 CPU USB3.0 Type-C / eDP / MIPI / HDMI / Touch interfaces (capacitive) Audio/ LAN / GPIO MicroSD / mPCIe socket 3G/LTE socket / Buzzer
EC3100-A-2G	Android					
EC3100-U-4G	Ubuntu	4GB DDR3	8GB	USB2.0 USB3.0	Yes	
EC3100-A-4G	Android					

## Optional Products:

Part No.	Description
PWR-007-SBC	Power Adapter (+12V) + power cord
LTE module	(Contact us for support list)
3G module	(Contact us for support list)

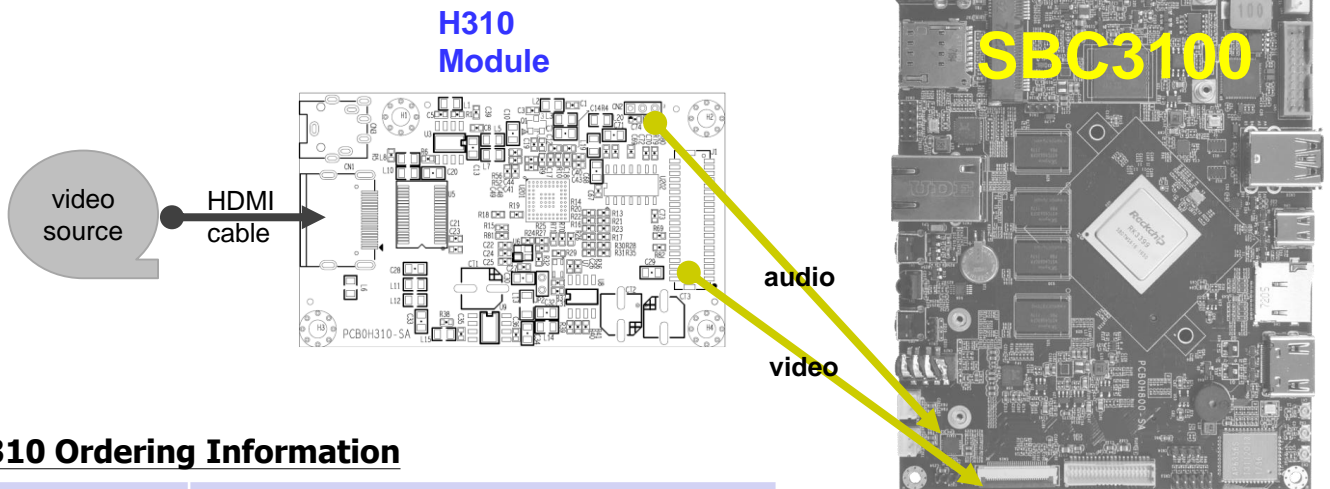
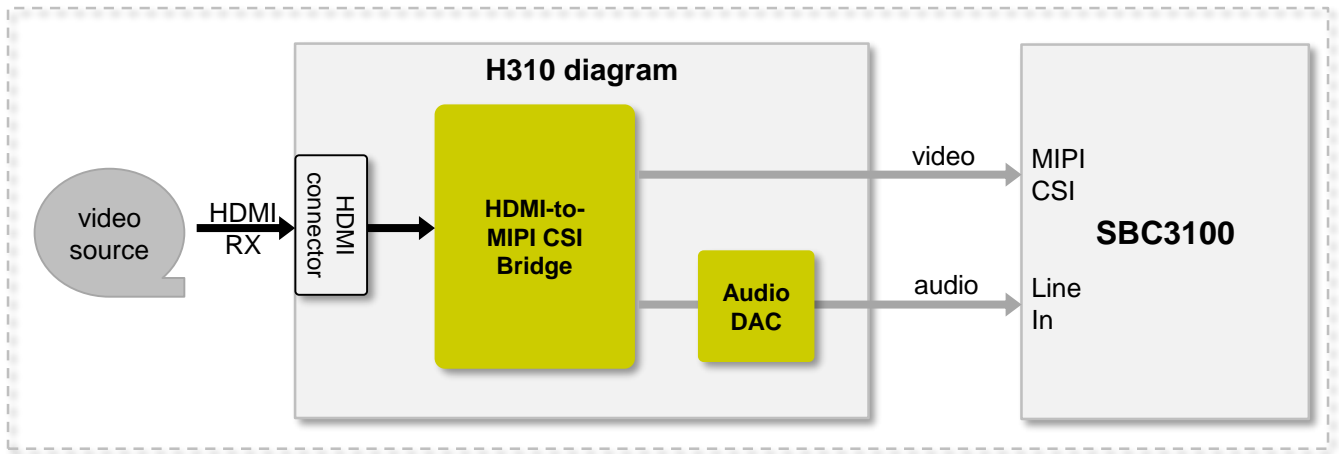
### Note:

D120 , H310 and H330 modules are not available with standard EC3100 enclosure. Contact us for customized enclosure to include these modules.

# H310 (HDMI Input Module)

## H310 Features:

- HDMI RX (receiver) interface
  - Support HDMI 1.4b standard
  - Video Input up to 1080p @ 60fps
- Video Output
  - MIPI CSI-2 compliant (version 1.1)
  - Up to 4 data lanes @ 1Gbps/lane
- Audio Output:
  - 24-bit I2S input
  - 2Vrms analog output (5V supply)
  - Sampling rate up to 192Khz
- Support video (H/V) scaling factors
- Dimension: <TBD>



## H310 Ordering Information

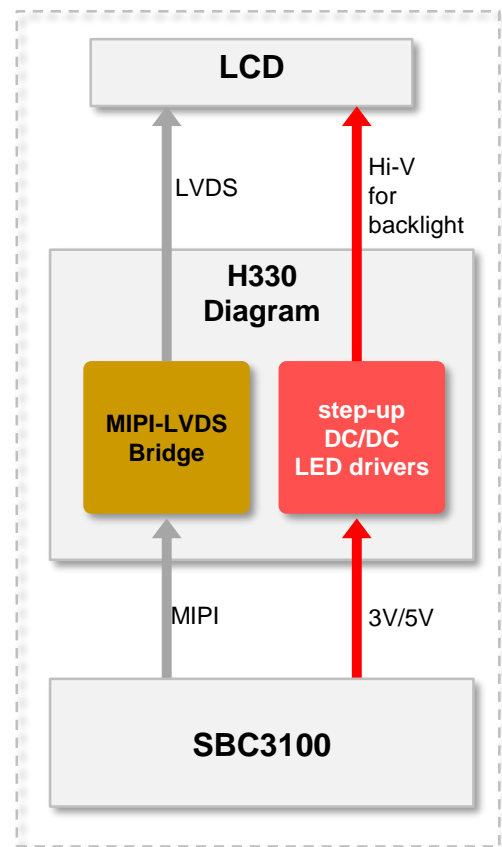
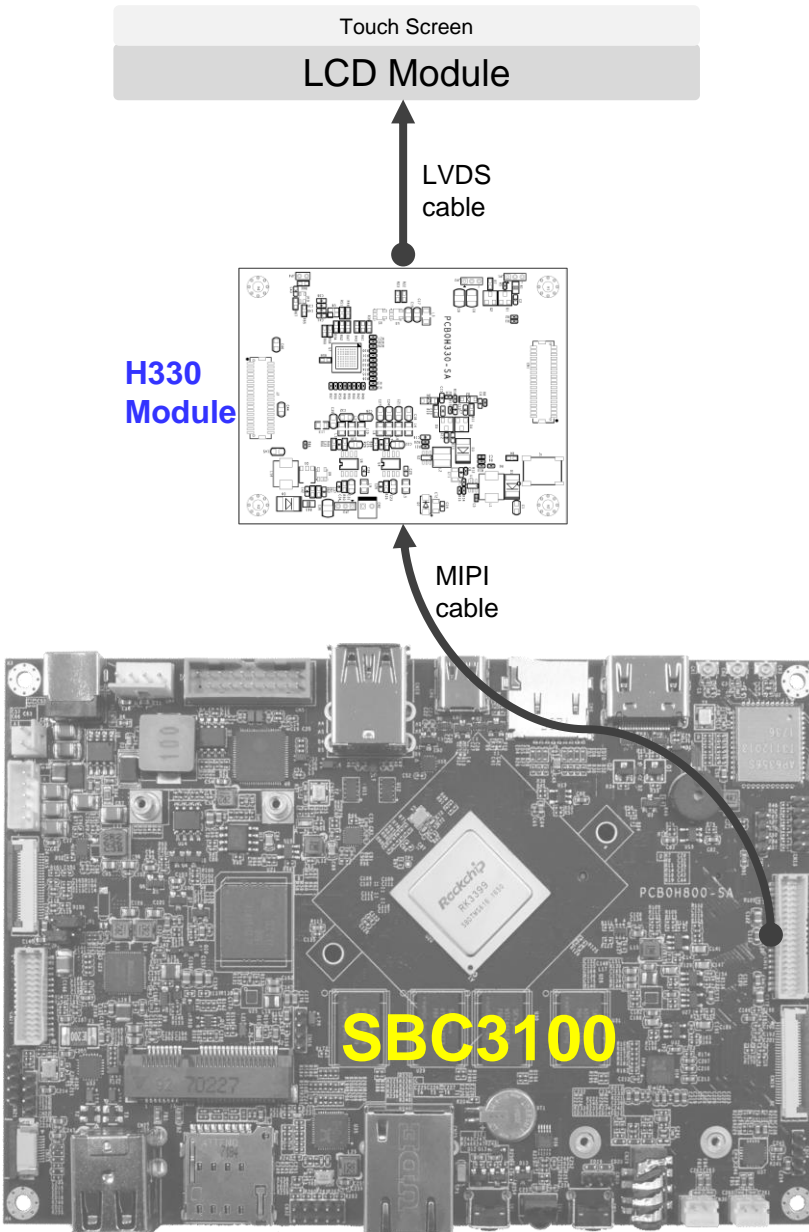
Part No.	Description
H310	HDMI Input Module (HDMI/MIPI-CSI bridge)

# H330 (LVDS Display Module with LED driver)

## H330 Features:

- LVDS Display Interface:
  - Input: 4-data-lane MIPI DSI
  - Output: 1600x1200/24-bit (single LVDS) or 1920x1080/24-bit (dual LVDS)
- LED Driver:
  - Input: 3.3V, 5V
  - Output: max. 30V for white LEDs
- Dimension: <TBD>

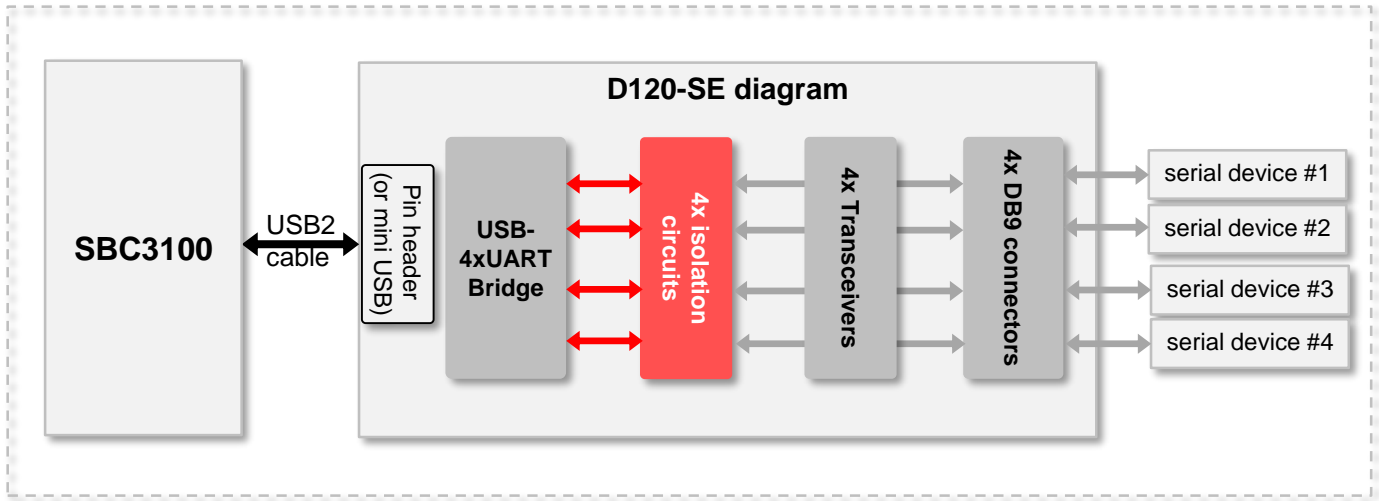
Note: H330 module requires customization on software, hardware and cables. Contact us for more information.



## H330 Ordering Information

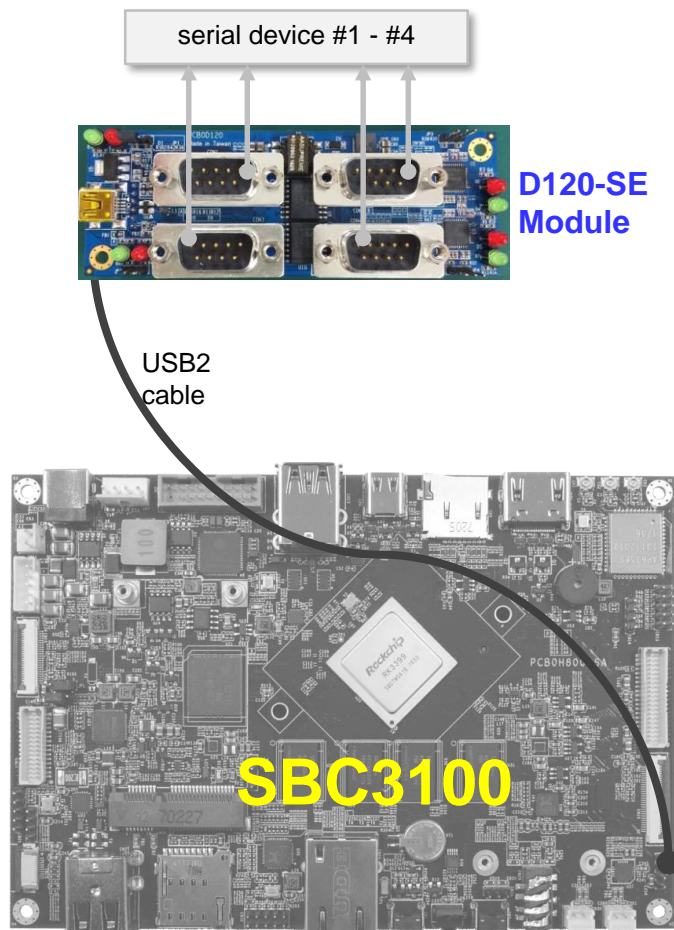
Part No.	Description
H330	LVDS Display interface + MIPI cable + LVDS cable

# D120-SE (4x RS232/485 with isolation)



## D120-SE Features:

- Connect to SBC3100 / SBC2100 USB2.0 interface
- For Linux, Android
- Standard DB9 connector
- 2.5KV isolation on each port
- Power isolation
- 2xLEDs for each port to display data TX/RX status
- Each port can be independently configured by jumper to support RS232 / RS422 / RS485 protocol
- RS232 (TXD, RXD, RTS, CTS)
- RS422 (TX+, TX-, RX+, RX-)
- RS485 (D+, D-): half duplex
- Compact size: 102 x 36mm



## D120-SE Ordering Information

Part No.	Description
D120-SE	4x RS232/RS422/RS485 card with isolation