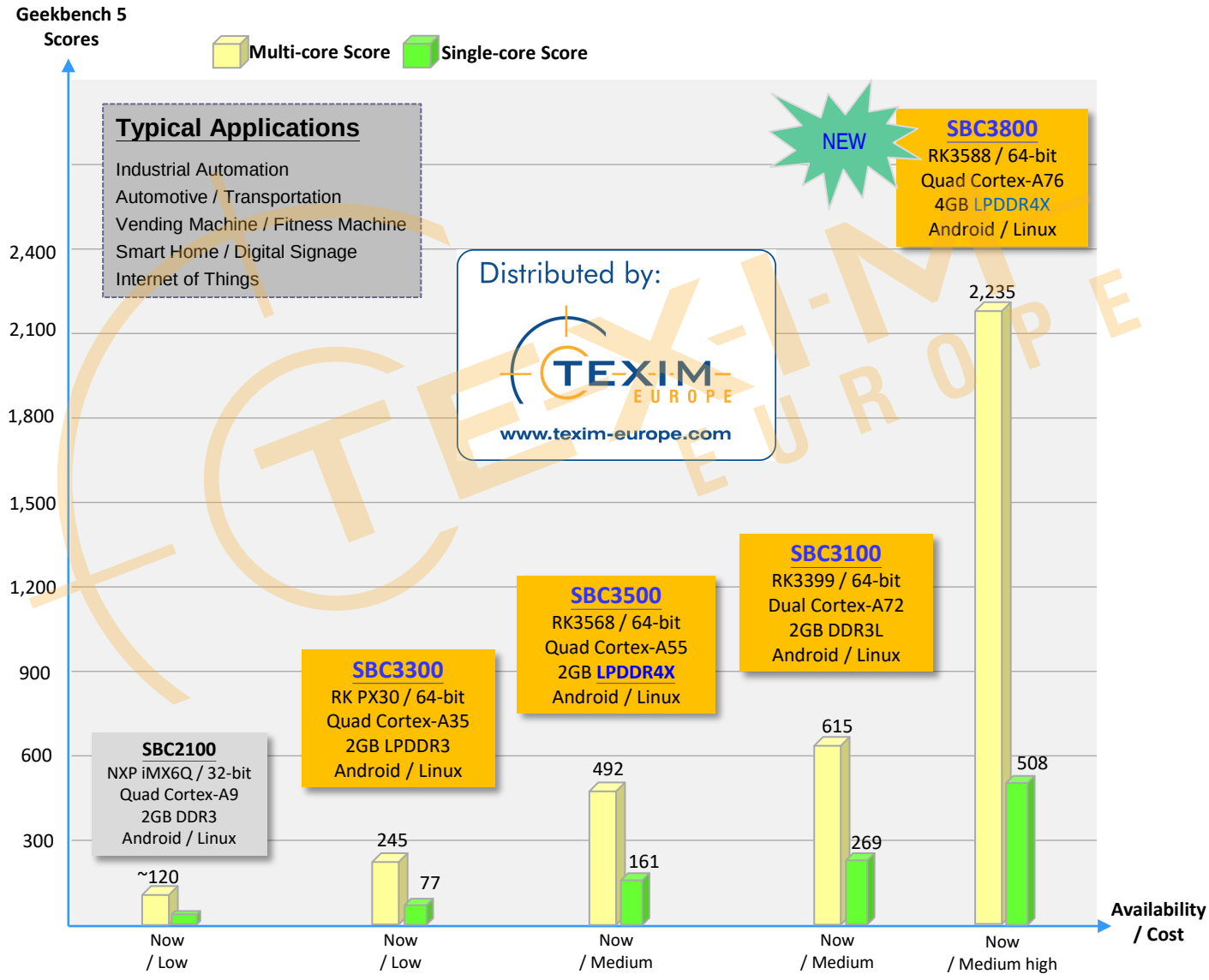
SBC Product Datasheet (2022-2023)

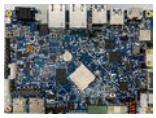
(ARM Single Board Computer)

Part Number	Descriptions	Page
SBC3300	Cost-effective Single Board Computer (quad-core Cortex-A35 CPU)	Click here
SBC3100	High performance Single Board Computer (dual-core Cortex-A72 CPU)	Click here
SBC3500	High performance Single Board Computer (quad-core Cortex-A55 CPU)	Click here
SBC3800 NEW	Ultra high-performance Single Board Computer (quad-core Cortex-A76 CPU)	Click here
SBC3500-K280	SBC3500 with 2x HDMI-TX interfaces	Click here



SBC Comparisons



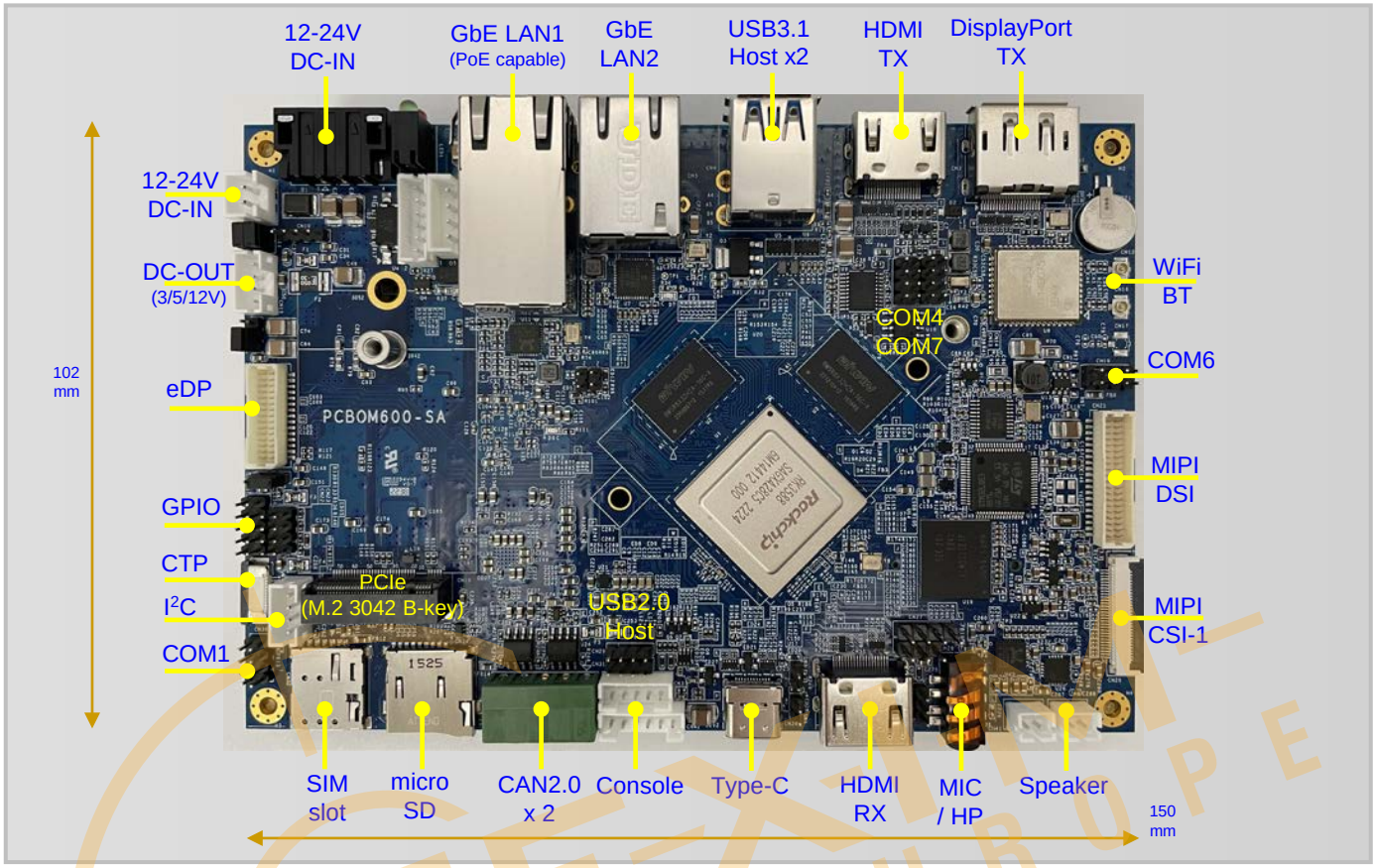

	SBC3800	SBC3100	SBC3500	SBC3300
Processor	Rockchip RK3588	Rockchip RK3399	Rockchip RK3568	Rockchip PX30K
ARM Cores	(64-bit) 4x Cortex-A76 + 4x A55 @2.4Ghz	(64-bit) 2x Cortex-A72 + 4x A53 @2Ghz	(64-bit) 4x Cortex-A55 @2Ghz	(64-bit) 4x Cortex-A35 @1.6Ghz
OS	Android / Debian	Android / Debian	Android / Ubuntu / Debian	Android / Ubuntu / Debian
RAM (DDR)	4GB / 8GB / 16GB **LPDDR4X**	2GB / 4GB DDR3L	2GB / 4GB / 8GB **LPDDR4X**	1GB / 2GB LPDDR3
Flash (eMMC)	32GB	8GB	8GB	8GB
NPU	6 Tops	- N/A -	0.8 Tops	- N/A -
Ethernet	LAN1: GbE (*) LAN2: GbE	1x GbE	LAN1: GbE (*) LAN2: GbE	LAN1: 10/100M (*) LAN2: 10/100M
Display Interface	1x HDMI (8K) 1x DP (8K) 1x eDP (4K) 1x MIPI-DSI (4K)	1x HDMI (4K) 1x DP (4K) 1x eDP (2K) 2x MIPI-DSI (2K)	1x HDMI (4K) 1x eDP (2K) [1x LVDS (1280x800) or MIPI-DSI (FHD)]	1x TTL-RGB (FHD) [1x LVDS (1280x800) or 1x MIPI-DSI (FHD)]
Touch I/F	1× Capacitive	1× Capacitive	1x Capacitive	1× Capacitive
Audio Interface	1x MIC/HP + 2x SPK + 1x Line-in	1×MIC/HP + 2×SPK	1x MIC/HP + 1x SPK	1×MIC/HP + 2×SPK
Camera	2x MIPI-CSI	1x MIPI-CSI	1x MIPI-CSI	1x MIPI-CSI
miniPCIe con	1x (M.2 3042 M-key) socket	1x socket	1x (M.2 3042 M-key) socket	- N/A -
LTE socket	(M.2 3042/3052 B-key) LTE/5G + SIM slot	(mPCIe) LTE socket + SIM slot	(M.2 3042/3052 B-key) LTE/5G + SIM slot	(mPCIe) LTE socket + SIM slot
WiFi/BT	(*) WiFi 6 (802.11ax) + BT 5.0	(*) WiFi 802.11 bgn/ac + BT 5.0	(*) WiFi 802.11 bgn/ac + BT 5.0	(*)WiFi 802.11 bgn + BT 4.1
USB 3.0	2x type-A host + 1x OTG (TypeC)	4x type-A host+1xTypeC	2x type-A host + 1x OTG	- N/A -
USB 2.0	2x host pin header	3x host	5x host pin header	5x host + 1x OTG
SD Card	1x microSD	1x microSD	1x microSD	- N/A -
HDD/SSD	1x (M.2) socket for PCIe SSD	- N/A -	1x (M.2) socket for PCIe SSD	- N/A -
COM ports	4x COM (RS232 or RS485)	- N/A -	2x RS232 (or RS485) + 2x RS232	2x RS232 (or RS485)
GPIO	8-bit	8-bit	8-bit	8-bit
CAN Bus	(*) 2x CAN2.0	- N/A -	(*) 2x CAN2.0	- N/A -
I2C port	1x master	1x master	1x master	1x master
SPI	1x SPI	- N/A -	1x SPI	- N/A -
Buzzer	- N/A -	YES	- N/A -	- N/A -
Realtime clock (RTC)	YES	YES	YES	YES
MCU (on/off)	(*) YES	- N/A -	(*) YES	- N/A -
Wake-on-LAN	YES	- N/A -	YES	- N/A -
Power Input	12V-24V	12V-24V	12V-24V / (*) 9V-36V (*) Over-Voltage Protection	12V
PoE module (PD)	(*) YES	- N/A -	(*) YES	(*) YES
Dim (mm)	150 x 102 x H	150 x 102 x H	146 x 102 x H	100 x 72 x H
Operating Temperature	0ºC to 70ºC -20ºC to 70ºC	0ºC to 70ºC -20ºC to 70ºC	0ºC to 70ºC -20ºC to 70ºC	0ºC to 70ºC -20ºC to 70ºC

(*) optional function

Distributed by www.texim-europe.com

SBC3800 (Quad ARM Cortex-A76)

(Laptop-class performance with smartphone efficiency)



Specifications:

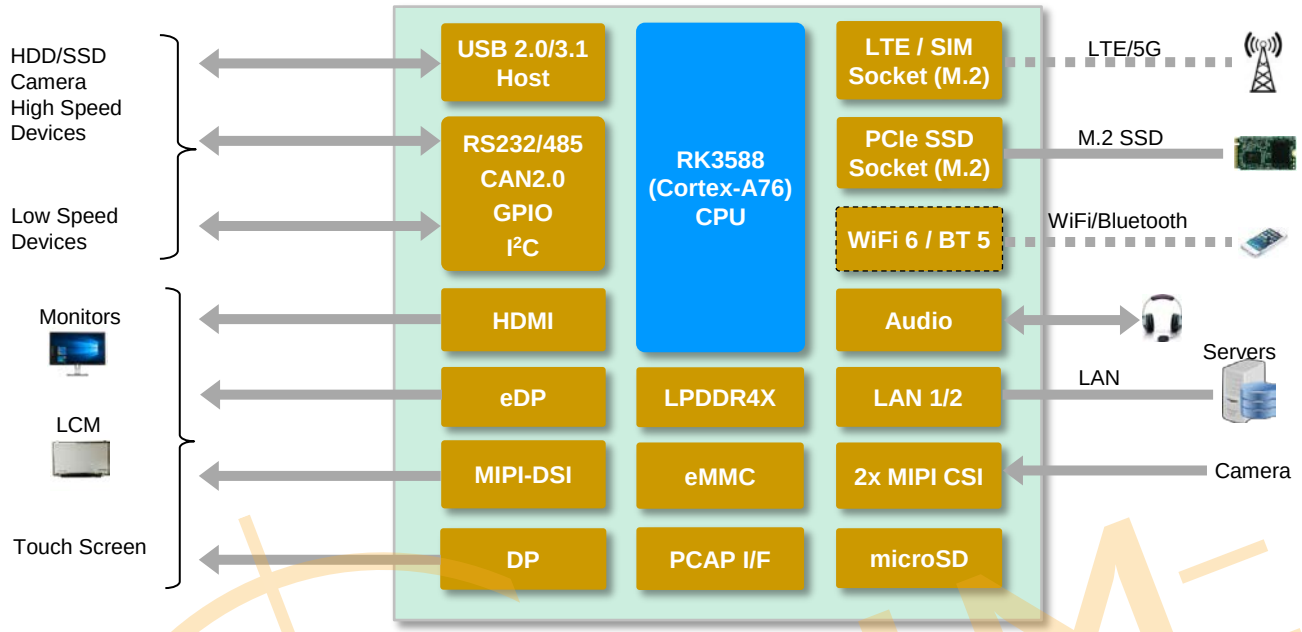
➢ Small size (150mm x102mm)	➢ Android / Debian OS for application development
➢ 12V-24V DC input	➢ PoE (Power over Ethernet) module (optional)
➢ CPU: Quad Cortex-A76 + Quad Cortex-A55 ➢ NPU: 6 TOPS neural processing unit	➢ 4GB LPDDR4X (up to 16GB) ➢ 32GB eMMC (up to 128GB)
➢ GPU: ARM Mali G610 MP4 (OpenGLES 3.2 / OpenCL 2.2 / Vulkan 1.2) ➢ VPU: 8K video decoder and encoder	➢ Multiple display interfaces : 1x HDMI (8K) / 1x DP (8K) 1x eDP (4K) / 1x MIPI DSI (4K)
➢ 1x HDMI 2.0 RX (4K @ 60fps)	➢ 1x Capacitive touch interface (I²C)
➢ 2x MIPI-CSI-RX (4-lane) camera interface	➢ 2x LAN interfaces (LAN2 optional)
➢ Audio interfaces (1x mic/headphone + 2x speaker interfaces)	➢ 3x USB3.1 Gen 1 (2x Type-A + 1x Type-C) ➢ 2x USB2.0 Host (pin header)
➢ 1x microSD / 8x GPIO / 1x I²C / 1x RTC ➢ 4x RS232 port (can be configured to RS485)	➢ 1x SPI / 1x PWM (optional) ➢ 2x CAN2.0 (optional)
➢ M.2 (3042/3052) socket for LTE/5G modem	➢ M.2 (3042) socket for PCIe SSD
➢ Support Wake-on-LAN	➢ WiFi 6 (802.11ax) + Bluetooth 5.0 (optional)

Distributed by www.texim-europe.com

SBC3800 (Quad ARM Cortex-A76)

(Laptop-class performance with smartphone efficiency)

Block Diagram



EC3800

EC3800 is a small size embedded computer based on SBC3800. The light-weight aluminum enclosure enables users to rapidly deploy it in a wide range of applications. Contact us for the availability.

Ordering Information

Part No.	OS	WiFi 6 + BT 5	Common Specifications
SBC3800-D	Debian	---	RK3588 / **4GB** LPDDR4X / **32GB** eMMC HDMI TX / eDP / DP / MIPI-DSI / Touch IF HDMI RX / Audio / USB 2.0/USB 3.1 / Audio GPIO / 4x RS232 / RTC / mSD / **1x GbE LAN** M.2 PCIe Socket / SIM slot / M.2 LTE socket
SBC3800-A	Android		
SBC3800-D-WB	Debian	YES	
SBC3800-A-WB	Android		

* 4x RS232 can be configured as RS485 on purchasing the board. Contact us for more information.

* Contact us for custom requirements: 8GB/16GB RAM, larger eMMC size, 2x LAN, RS485, etc.

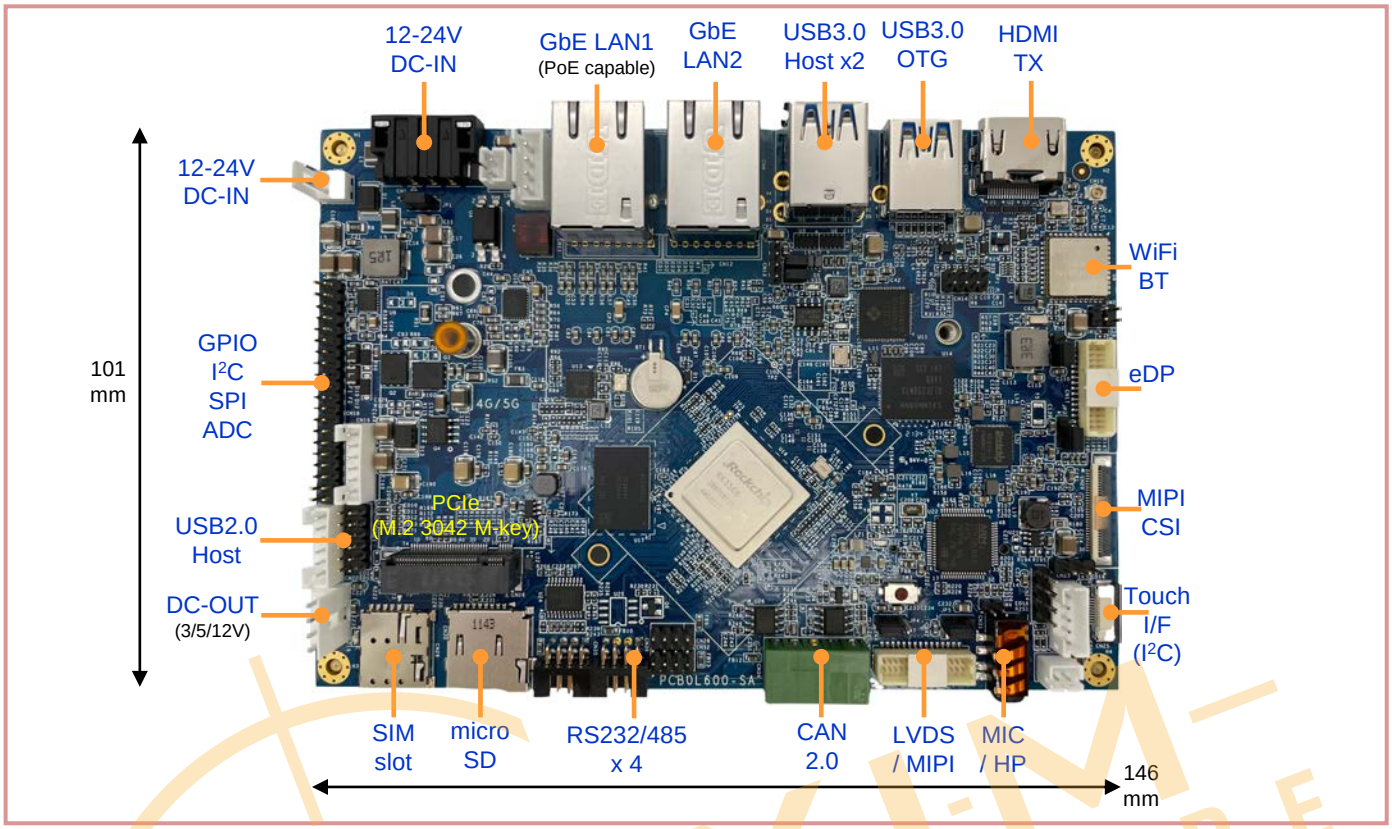
Option Modules

Part No.	Description
PWR-008-SBC33	Power Adapter (+12V) + power cord
S76GH-M2	LTE module SIM7600G-H-M2 (Global Bands) / M.2 form factor
K330	MIPI DSI-to-LVDS display module

Part No.	Description
POE-GB-B01	GbE Power over Ethernet Module, RT7402D
WLS-025	(802.11ax WiFi 6275 + BT 5.0) + RF cable +Antenna
M250	HDMI-to-VbyOne display module

Distributed by www.texim-europe.com

SBC3500/EC3500 (Quad ARM Cortex-A55)



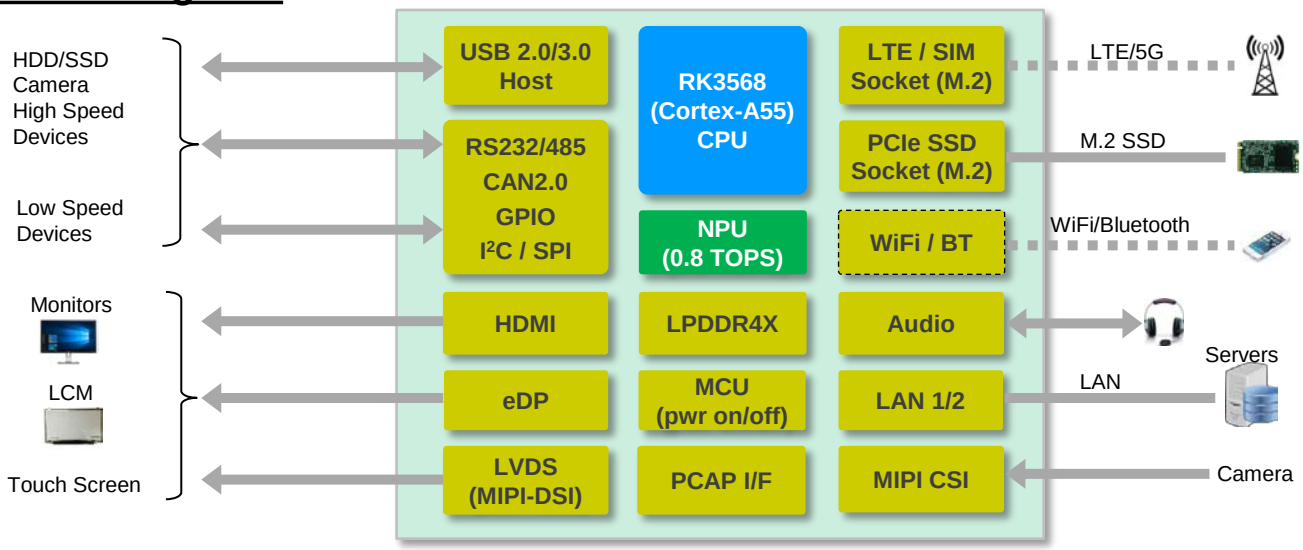
Features:

➢ Small size (146mm x101mm)	➢ Quad Cortex-A55 @ 2Ghz
➢ 12V-24V DC range (optional voltage protection) SBC3500 operates at 12V-24V DC and offers optional: (1). 9V~36V wide range DC input (2). over-voltage, over-current and reverse-voltage protection	➢ Android/Ubuntu for application development SBC3500 offers Ubuntu, Android OS, tool chains, device drivers and sample application software. These resources enable users to quickly develop and deploy software for their applications.
➢ Software controlled power on-off (optional) SBC3500 power on/off can be controlled by software. This is for software to ensure data is completely saved before system shutdown.	➢ 2x LAN Interfaces (LAN2 optional) SBC3500 is built with 1x GbE interface by default. An optional GbE LAN2 can be added. Two LANs are independent ports and provide more communication bandwidth.
➢ Multiple display interfaces : HDMI 2.0 TX / eDP 1.3 / LVDS (MIPI-DSI)	➢ Capacitive touch interface (I²C)
➢ MIPI-CSI camera interface	➢ 2x USB3.0 + 5x USB2.0
➢ PoE (Power over Ethernet) (optional)	➢ 4x COM port (RS232 or RS485)
➢ Neural Processing Unit up to 0.8 TOPS	➢ microSD / CAN2.0 / GPIO / I²C / SPI / RTC
➢ M.2 socket for LTE/5G modem	➢ M.2 socket for PCIe SSD
➢ Support Wake-on-LAN	➢ WiFi 802.11 bgn/ac + Bluetooth 5.0 (optional)

Distributed by www.texim-europe.com

SBC3500/EC3500 (Quad ARM Cortex-A55)

Block Diagram:



EC3500:

EC3500 is a small size embedded computer based on SBC3500. The light weight aluminum enclosure enables users to rapidly deploy it in a wide range of applications. Contact us for the availability.

SBC3500 (op temp: 0ºC to 70ºC) Ordering Information

Part No.	OS	WiFi /BT	The 2nd LAN + MCU + CAN Bus	Common Specifications
SBC3500-U-2G	Ubuntu	---	---	OP temp: 0ºC to 70ºC RK3568 / 2GB DDR / 8GB eMMC HDMI / eDP / LVDS / Touch IF Audio / USB 2.0/3.0 Host / OTG GPIO / 4x RS232 (or RS485) / RTC 1x GbE LAN / LTE Socket / SIM slot M2 PCIe socket
SBC3500-A-2G	Android			
SBC3500-U-2G-WB	Ubuntu	YES	---	
SBC3500-A-2G-WB	Android			
SBC3500-U-2G-MX	Ubuntu	YES	YES	
SBC3500-A-2G-MX	Android			

SBC3500W (op temp: -20ºC to 70ºC) Ordering Information

Part No.	OS	WiFi /BT	The 2nd LAN + MCU + CAN Bus	Common Specifications
SBC3500W-U-2G	Ubuntu	---	---	OP temp: -20ºC to 70ºC RK3568 / 2GB DDR / 8GB eMMC HDMI / eDP / LVDS / Touch IF Audio / USB 2.0/3.0 Host / OTG GPIO / 4x RS232 (or RS485) / RTC 1x GbE LAN / LTE Socket / SIM slot M2 PCIe socket
SBC3500W-A-2G	Android			
SBC3500W-U-2G-WB	Ubuntu	YES	---	
SBC3500W-A-2G-WB	Android			
SBC3500W-U-2G-MX	Ubuntu	YES	YES	
SBC3500W-A-2G-MX	Android			

* Not all models are available. Contact us for custom requirements: bigger flash size, LAN2, WiFi/BT, etc.

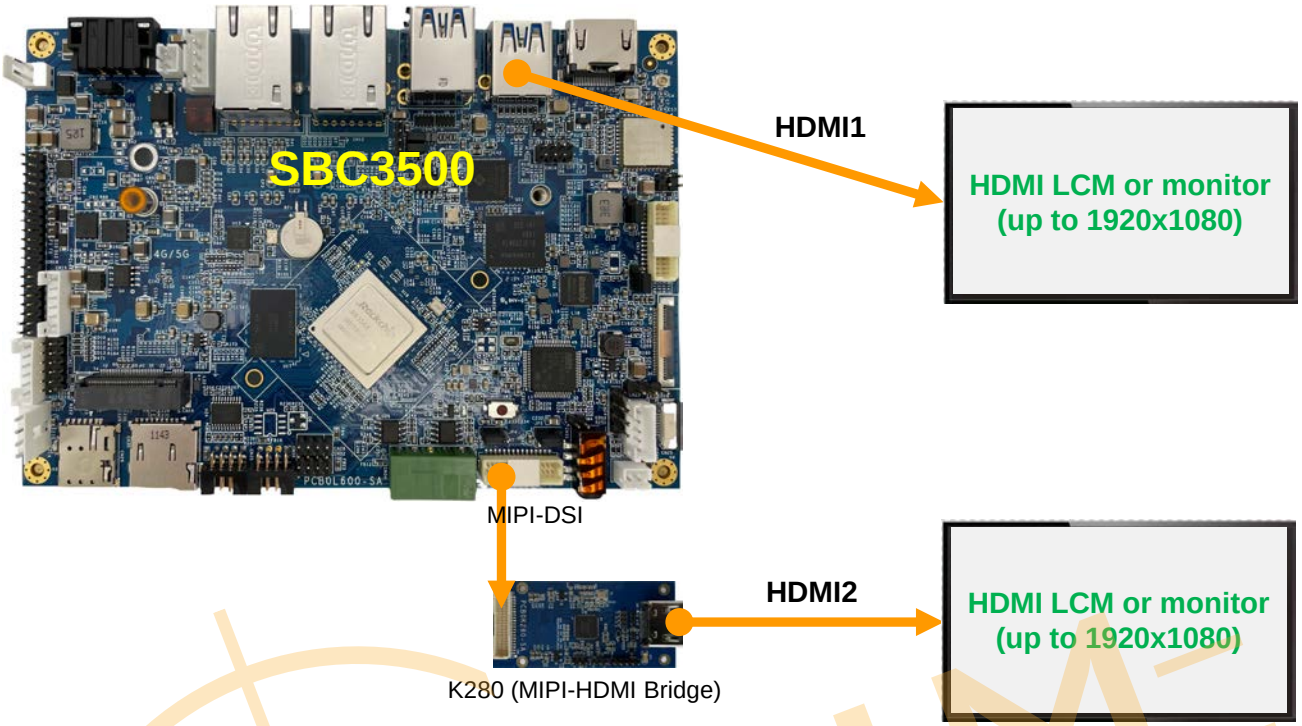
SBC3500 Option Module

Part No.	Description
PWR-008-SBC33	Power Adapter (+12V) + power cord
S76GH-M2	LTE module SIM7600G-H-M2 (Global Bands)

Part No.	Description
POE-GB-B01	GbE Power over Ethernet Module, RT7402D
WLS-009	(802.11bgn/ac WiFi 6256 + BT 5.0) +RF cable +Antenna

Distributed by www.texim-europe.com

SBC3500-K280 (SBC with 2x HDMI-TX)



Features:

- SBC3500 is extended to HDMI2 by K280 module
- Max display resolution: 1920x1080
- Support any size of HDMI LCM / Monitor
- The same or different contents on 2x LCM/monitor
- The same or different resolutions on 2x LCM/monitor
- Support Android / Debian

Typical Applications

Vending Machine
Fitness Machine
Digital Signage
POS
Gaming

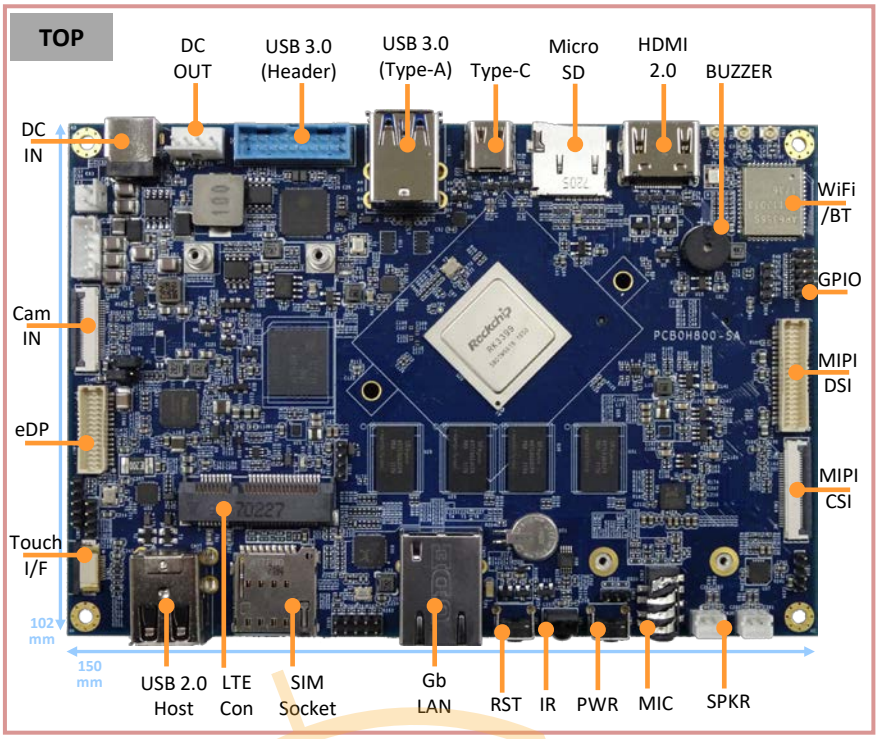
SBC3500-K280 Ordering Information

Part No.	OS	WiFi/BT	Common Specifications
SBC3500-U-2G-K280	Ubuntu	---	RK3568 / 2GB DDR / 8GB eMMC HDMI / eDP / LVDS / Touch IF Audio / USB 2.0/3.0 Host / OTG GPIO / 4x RS232 (or RS485) / RTC 1x GbE LAN / LTE Socket / SIM slot M2 PCIe socket / K280 module
SBC3500-A-2G-K280	Android		
SBC3500-U-2G-WB-K280	Ubuntu	YES	
SBC3500-A-2G-WB-K280	Android		

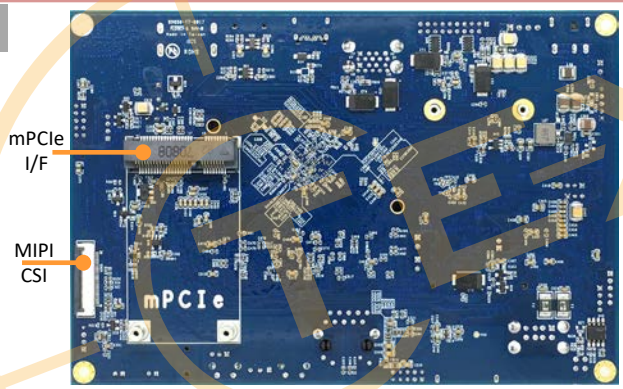
Distributed by www.texim-europe.com

SBC3100/EC3100 (Hexa ARM Cortex-A72/A53)

TOP

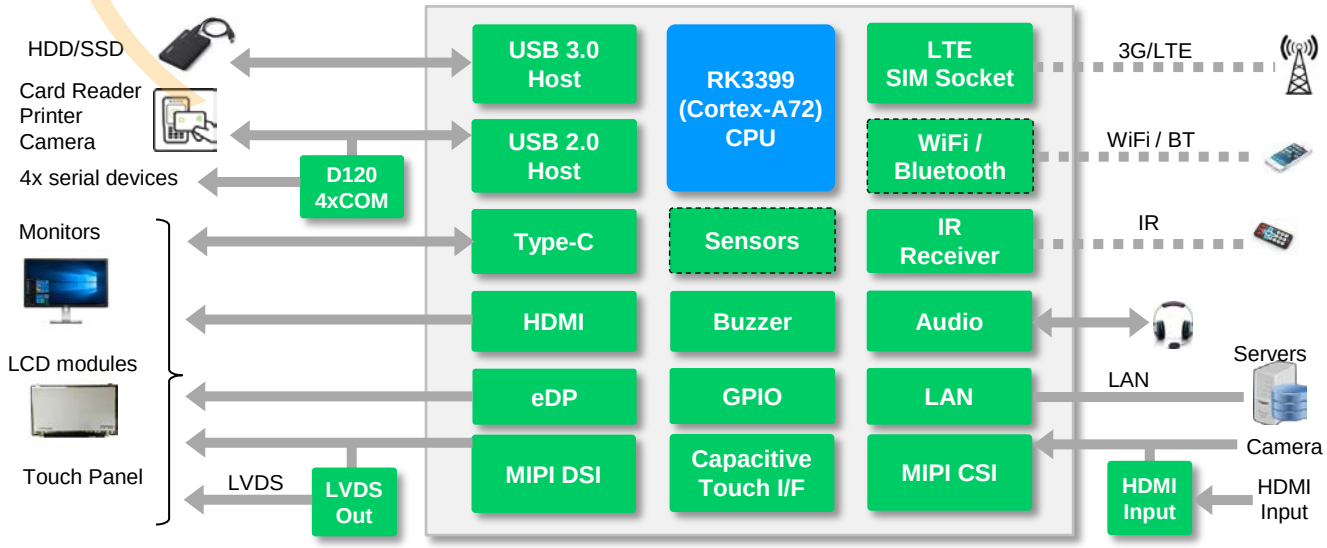


BOTTOM



Features:

- Small size (150mm x102mm)
- 6 cores (2xCortex-A72+4xCortex-A53)
- Powerful ARM Cortex-A72 up to 2Ghz
- Multiple Display Interfaces
  - HDMI / DisplayPort
  - MIPI-DSI / eDP
- Touch screen interface
- 10/100/1000 Mbps Ethernet port
- 4x USB 3.0 Host / Type-C
- MIPI-CSI camera interface
- 12V-24V DC Input
- Support Android / Debian



Distributed by www.texim-europe.com

SBC3100/EC3100 (Hexa ARM Cortex-A72/A53)

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



179 mm

105 mm

33.2 mm



SBC3100 Ordering Information

* Not all models are available now. Contact us for any custom requirements.

Part No.	OS	RAM	Common Specifications
SBC3100-D-2G	Debian	**2GB DDR3**	RK3399 CPU / 8GB eMMC HDMI / eDP / MIPI / Touch IF / Gb Ethernet Audio / GPIO / MicroSD / mPCIe socket / LTE socket RTC / USB2.0 Host / USB 3.0 Host / USB 3.0 Type-C
SBC3100-A-2G	Android		

EC3100 Ordering Information

Part No.	OS	RAM	Common Specifications
EC3100-D-2G	Debian	**2GB** DDR3	RK3399 CPU / 8GB eMMC USB3.0 Type-C / DP / HDMI / Gb Ethernet / LTE Socket RTC / Audio/ GPIO / MicroSD / mPCIe socket / Buzzer
EC3100-A-2G	Android		

Optional Products

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

Part No.	Description
K330	LVDS Display I/F + MIPI cable
S76GH	LTE module SIM7600G-H (Global Bands)

Note:

(1). Both SBC3100 and EC3100 have 4GB RAM models. Contact us for details.

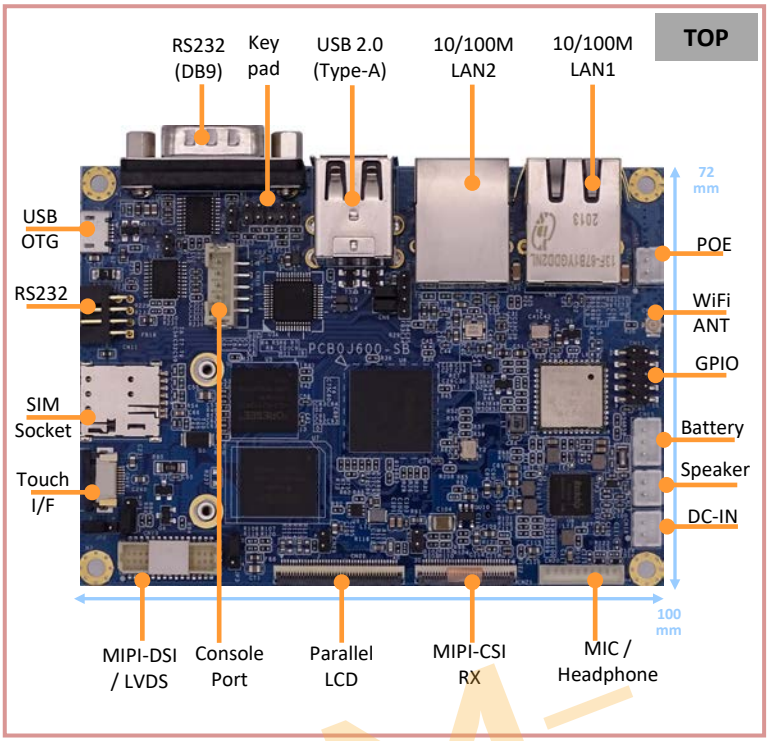
(2). D120 and K330 modules are not with standard EC3100 enclosure. Contact us for customized enclosure to include these modules.

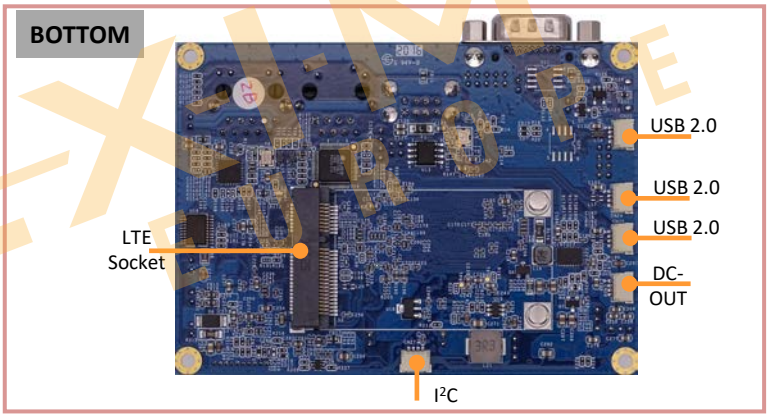
Distributed by www.texim-europe.com

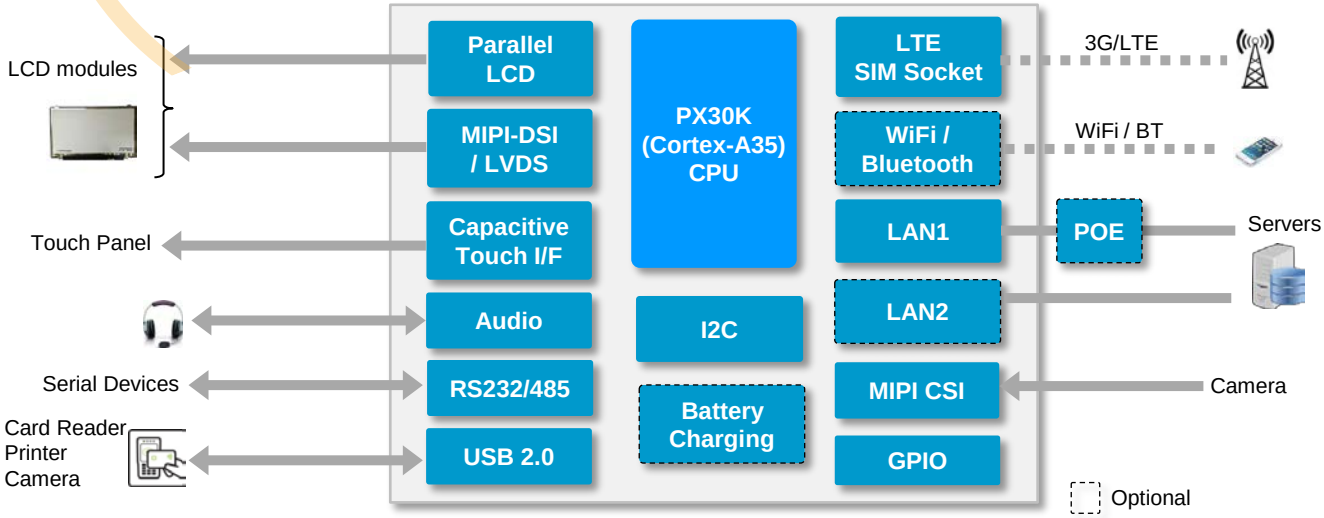
SBC3300/EC3300 (Quad ARM Cortex-A35)

Features:

- Tiny size (100mm x72mm)
- Quad (64-bit) Cortex-A35 up to 1.3Ghz
- Dual Display Interfaces
- Touch screen interface
- Dual 10/100Mbps LAN ports (LAN2 optional)
- 5x USB 2.0 Host ports
- 2x RS232 (or RS485) port
- 8-bit GPIO
- 12V DC Input
- Support PoE (Power Over Ethernet) (optional)
- Support Battery Charging (optional)
- Wide Temp Range (-20°C to 70°C)
- Support DIN Rail Mounting (EC3300)







Distributed by www.texim-europe.com

SBC3300/EC3300 (Quad ARM Cortex-A35)

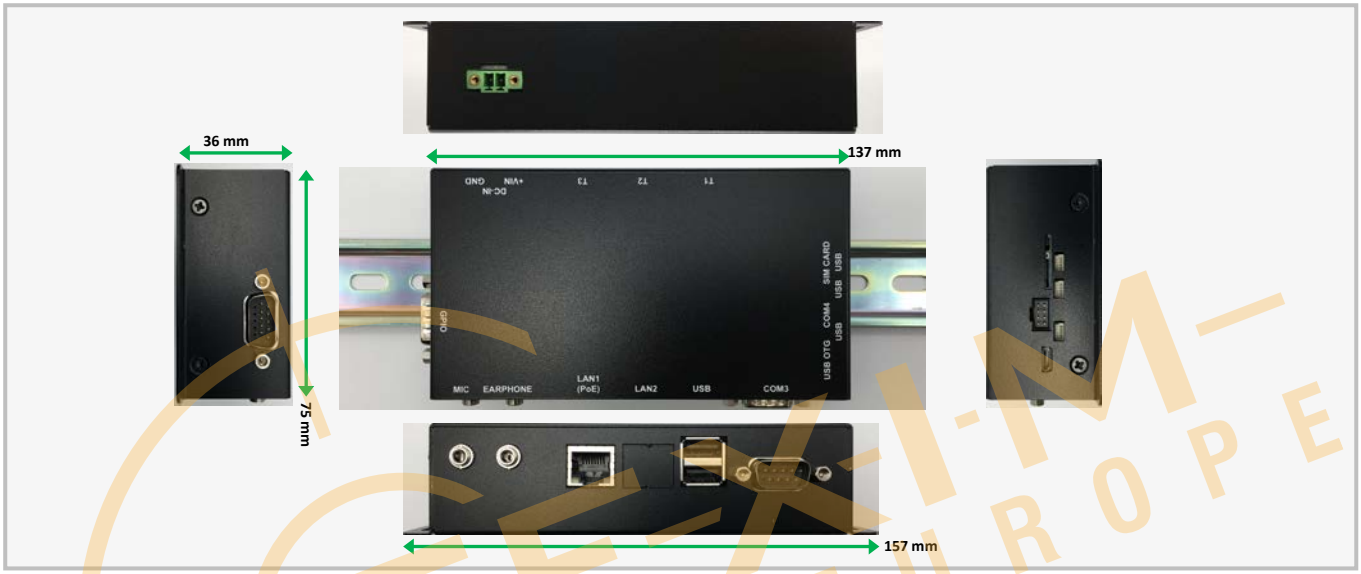
Overview

EC3300 is a tiny size embedded computer based on SBC3300. The light weight aluminum enclosure enables users to rapidly deploy it in a wide range of applications. EC3300 can be mounted on a DIN rail.

Brief Specifications

CPU /RAM /eMMC	SBC3300 specifications
Power Input	+9V to +36V (with K920)
Environment	Operating temperature: -20ºC to 70ºC
Dimension	157 x 75 x 36 mm

I/O Connectors	8x GPIO connector / 2x RS232 (or RS485)
	1x MIC / Headphone
	5x USB 2.0 host / 1x USB 2.0 OTG
	1x SIM slot / 3x antenna (option)



SBC3300 Ordering Information

Part No.	OS	WiFi /BT	The 2nd LAN	Battery Charger	Common Specifications
SBC3300-U-2G	Ubuntu	---	---	---	Rockchip PX30K CPU / 2GB LPDDR3 /8GB eMMC Parallel LCD / LVDS / Touch IF / Audio / RTC GPIO / 2x RS232 (or RS485) / USB 2.0 Host / OTG 1x 100M LAN / LTE Socket / SIM slot
SBC3300-A-2G	Android				
SBC3300-U-2G-MX	Ubuntu	YES	YES	YES	
SBC3300-A-2G-MX	Android				

EC3300 Ordering Information

Part No.	OS	WiFi /BT	The 2nd LAN	Battery Charger	Common Specifications
EC3300-U-2G	Ubuntu	---	---	---	Rockchip PX30K CPU / 2GB LPDDR3 / 8GB eMMC Audio / GPIO / 2x RS232 (or 485) / RTC USB 2.0 Host / OTG / Aluminum Enclosure 1x 100M LAN / LTE Socket / SIM slot
EC3300-A-2G	Android				
EC3300-U-2G-MX	Ubuntu	YES	YES	YES	
EC3300-A-2G-MX	Android				

* Not all models are available. Contact us for custom requirements: bigger flash size, LAN2, WiFi/BT, etc.

Optional Products

Part No.	Description
PWR-008-SBC33	Power Adapter (+12V) + power cord
K920	9V-36V DC-IN converter board
S76GH	LTE module SIM7600G-H (Global Bands)

Part No.	Description
POE-MB-A01	10/100M Power Over Ethernet Module
WLS-020	(802.11bgnWiFi+BT4.1)+ RF cable + Antenna
---	----

Distributed by www.texim-europe.com

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Texim Europe B.V. its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Texim”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Texim makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product.

It is the customer’s responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time.

All operating parameters, including typical parameters, must be validated for each customer application by the customer’s technical experts.

Please contact us if you have any questions about the contents of the datasheet.

This may not be the latest version of the datasheet. Please check with us if a later version is available.

Distributed by www.texim-europe.com

Texim Europe - contact details



Headquarters & Warehouse

Elektrostraat 17
NL-7483 PG Haaksbergen
The Netherlands

T: +31 (0)53 573 33 33
E: info@texim-europe.com
Homepage: www.texim-europe.com



The Netherlands

Elektrostraat 17
NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33
E: nl@texim-europe.com



Belgium

Zuiderlaan 14, box 10
B-1731 Zellik

T: +32 (0)2 462 01 00
E: belgium@texim-europe.com



UK & Ireland

St Mary's House, Church Lane
Carlton Le Moorland
Lincoln LN5 9HS

T: +44 (0)1522 789 555
E: uk@texim-europe.com



Germany

Bahnhofstrasse 92
D-25451 Quickborn

T: +49 (0)4106 627 07-0
E: germany@texim-europe.com



Germany

Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
E: muenchen@texim-europe.com



Austria

Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
E: austria@texim-europe.com



Nordic

Stockholmsgade 45
2100 Copenhagen

T: +45 88 20 26 30
E: nordic@texim-europe.com



Italy

Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
E: italy@texim-europe.com