

EC2500

ARM Quad-Core Embedded Computer

Features

- High Brightness TFT LCD
- 50K hours backlight lifetime
- -20°C~70°C Operating Temp
- Rich interfaces: USB, Ethernet, RS232, RS485, I²C, GPIO, CAN bus.
- Cortex-A9 Single /Dual /Quad cores
- Capacitive Touch Screen
- Light weight aluminum enclosure
- Android, Linux, Yocto
- 9V~36V wide range power input
- (Optional) Over voltage protection
- (Optional) WiFi, 3G module

New Features

High Brightness LCD
Long LED lifetime
Industrial Operating Temp



- 2 models are available:
 - ✓ EC2507: 7-inch LCD + capacitive touch
 - ✓ EC2510: 10.1-inch LCD + capacitive touch
- Typical Applications:
 - HMI
 - Digital Signage
 - Thin Client
 - IoT (Internet of Things) Gateway



EC2507 : with 7-inch Touch Screen LCD

EC2507 Dimension and I/O interfaces:

(unit: mm)

	EC2507 Display (brief spec)
Size	7-inch (diagonal)
Resolution	1024x600
Colors	16.7M
Contrast Ratio	560
Brightness	800 cd/m ²
Backlight	50,000 hours
View Angle (H)	150 degree
View Angle (V)	145 degree
Touch Screen Type	Projected Capacitive

Specifications and Ordering Information:

Part No.	OS	CPU	RAM	CAN Bus	GPIO	Voltage Protection	Common Specification	Dimension & Weight
EC2507WS-SUC	Ubuntu	iMX6S Single-Core	1GB DDR3	NO	8-bit	NO	4GB NAND Flash, Audio (MIC, Ear-Phone) 10/100/1000 LAN x1 USB Host x2 / USB OTG x1 RS232 x1/ RS485 x1, RTC MicroSD x1 / I ² C port x1 Power adapter (+12V) Operating: -20 °C to 70 °C	Dimension: 216 x 136 x 49 mm (*1) Weight: 800g
EC2507WS-SAC	Android							
EC2507WS-SUC-V	Ubuntu			YES	16-bit	YES		
EC2507WS-SAC-V	Android							

Optional Modules:

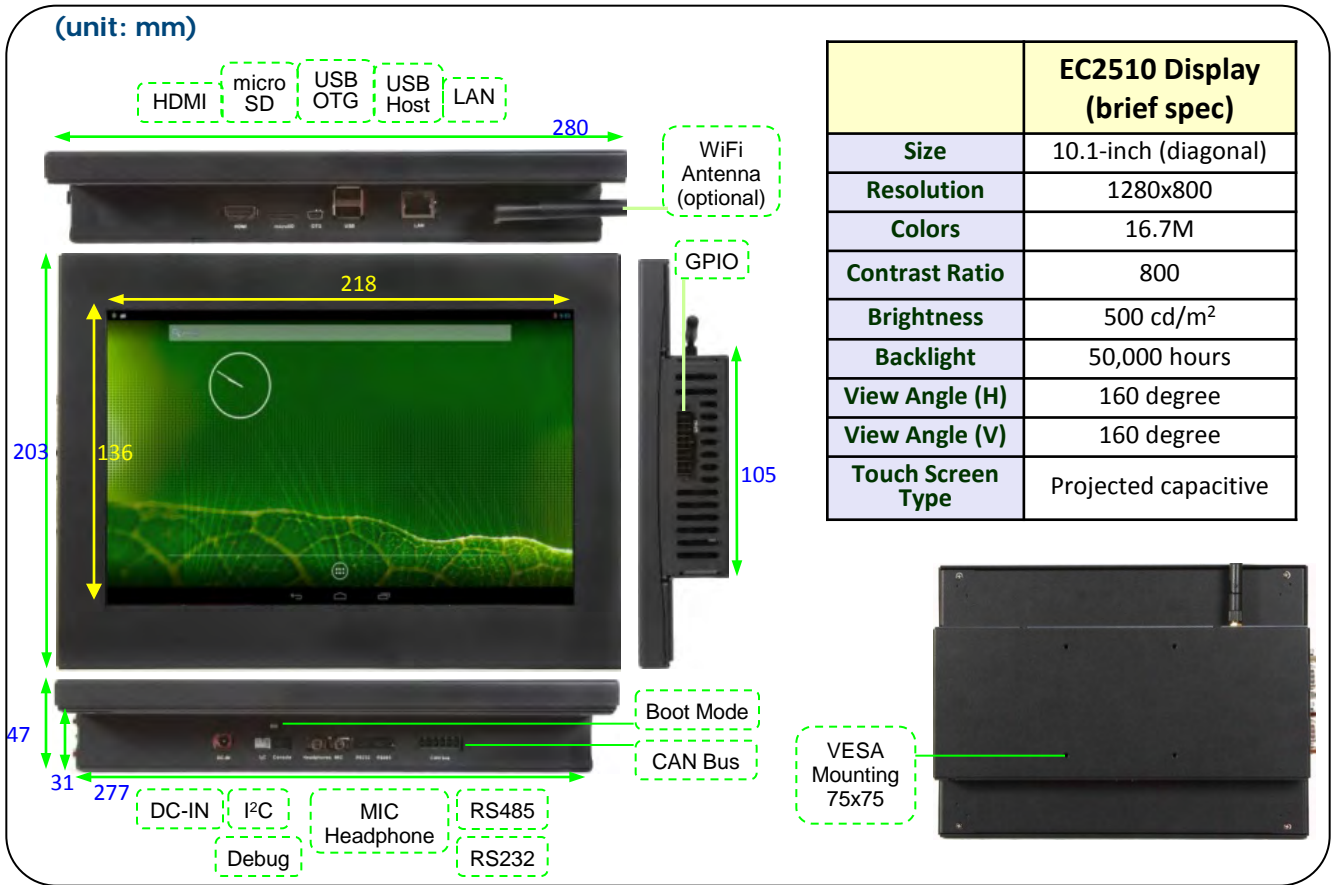
(*1) Not including antennas

Part No.	Description
WLS-006	(BL-8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse)
WCDMA-002	Quad-band 3G (WCDMA) module + Antenna
D100	4-ch Video capture (NTSC/PAL) module
D120	4xCOM port module (4x RS232/RS422 module)

Note: Specifications are subject to change without notice

EC2510 : with 10.1-inch Touch Screen LCD

EC2510 Dimension and I/O interfaces:



Specifications and Ordering Information

Part No.	OS	CPU	RAM	CAN Bus	GPIO	Voltage Protection	Common Specifications	Dimension & Weight
EC2510WX-SUC	Ubuntu	iMX6S Single-Core	2GB DDR3	NO	8-bit	NO	4GB NAND Flash, Audio (MIC, Ear-Phone) 10/100/1000 LAN x1 USB Host x2 / USB OTG x1 RS232 x1/ RS485 x1, RTC MicroSD x1 / I2C port x1 Power adapter (+12V) Operating: -20 °C to 70 °C	Dimension: 280 x 203 x 47 mm (*1)
EC2510WX-SAC	Android							
EC2510WX-SUC-V	Ubuntu			YES	16-bit	YES		Weight: 1600 g
EC2510WX-SAC-V	Android							

Optional Modules:

Part No.	Description
WLS-006	(BL-8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse)
WCDMA-002	Quad-band 3G (WCDMA) module + Antenna
D100	4-ch Video capture (NTSC/PAL) module
D120	4xCOM port module (4x RS232/RS422 module)

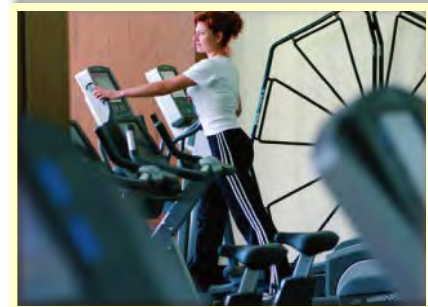
(*1) Not including antennas

Note: Specifications are subject to change without notice

NSD2500 Smart Display

The ideal platforms for multimedia, digital signage and HMI applications

New Features
High Brightness LCD
Long LED lifetime
Industrial Operating Temp



- High Brightness TFT LCD
- 50K hours backlight lifetime
- -20°C~70°C Operating Temp
- Capacitive Touch Screen
- 9V ~ 36V Wide Power Input
- Over voltage protection (option)
- Quad Band 3G Module (option)
- ARM Cortex-A9 Processor
- Android, Linux, Yocto

[Typical Applications]

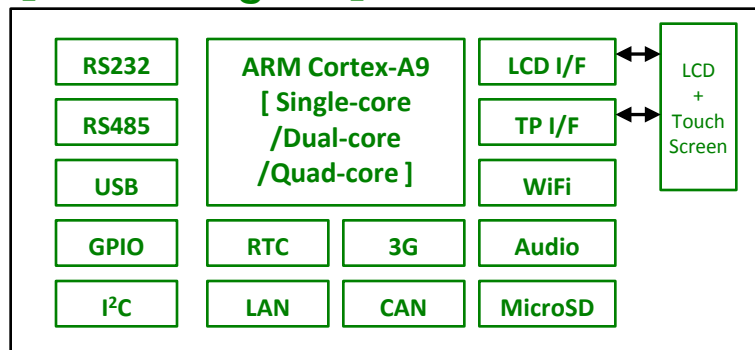
- ❑ Data logger
- ❑ Vehicle Infotainment
- ❑ Industrial Equipment
- ❑ Smart Home Console
- ❑ Digital Signage
- ❑ POS, KIOSK



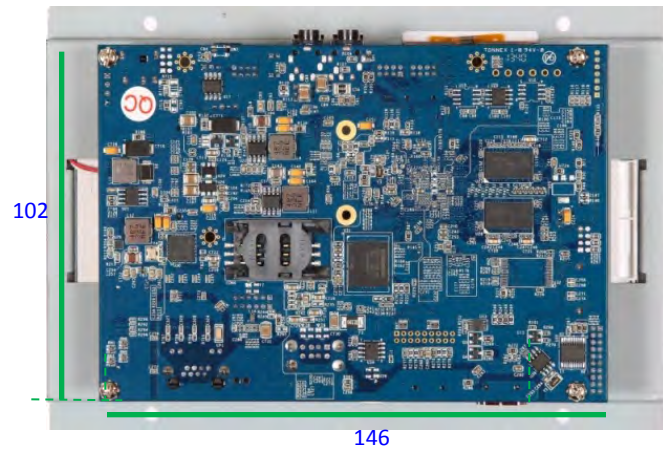
[Product Specifications]

	NSD2510WX	NSD2507WS
Screen Size	10.1-inch	7-inch
Resolution / Colors	1280x800 WXGA / 16.7M	1024x600 WSVGA / 16.7M
Contrast / Luminance	800 / 500 cd/m ²	560 / 800 cd/m ²
Backlight / Lifetime	LED / 50K hours	LED / 50K hours
View Angle	80/80/80/80 (L/R/T/B) degree	75/75/70/75 (L/R/T/B) degree
Touch Screen	Projected Capacitive	
Processor / RAM / Flash	Single-Core (iMX6S) 1GHz / 1GB DDR3 / 4GB Dual-Core (iMX6D) 1GHz / 1GB DDR3 / 4GB Quad-Core (iMX6Q) 1GHz / 2GB DDR3 / 4GB	
Power Input	DC +9V ~ +36V	
OS	Android / Linux / Ubuntu / Yocto	
Audio / Video	2x speaker connector + 1x MIC In + 1x headphone + 1x Line-in	
Network	1x 10M/100M/1G bps Ethernet	
RTC	Yes (with rechargeable battery)	
USB / SD Card	1x USB2.0 OTG port + 2x USB2.0 Host + 1x microSD card slot	
UART / I ² C / GPIO	1x RS232 + 1x RS485 + 1x I ² C master + 8-bit GPIO	
Weight / Dimension	<TBD> / 165x246x42 mm	<TBD> / 124x187x41 mm
Environment	Operating Temperature: -20°C to 70°C	
Optional Functions (-V option)	1x CAN bus + additional 8-bit GPIO + over voltage/current protection	
Optional Modules	3G module, 4xRS232/RS485 module	

[Block Diagram]



[NSD2507 Dimension]



(unit: mm)



[NSD2507 Ordering Information]

Part No.	OS	CPU	RAM	CAN Bus	GPIO	Voltage Protection	Common Specifications
NSD2507WS-SUC	Ubuntu	iMX6S Single-Core	1GB DDR3	NO	8-bit	NO	See specification table in previous page
NSD2507WS-SAC	Android						
NSD2507WS-SUC-V	Ubuntu			YES	16-bit	YES	
NSD2507WS-SAC-V	Android						

[Optional Modules]

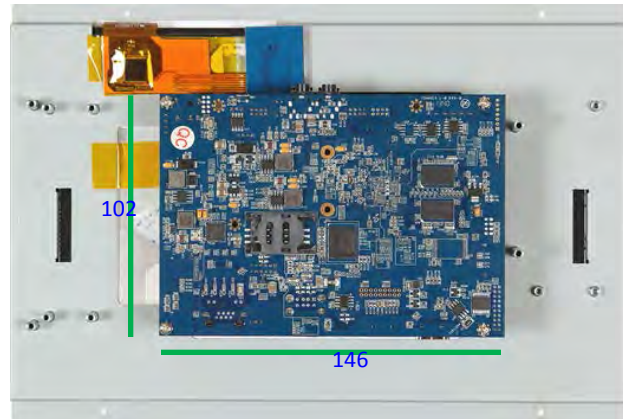
Part No.	Description
WLS-006	(RTL8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse)
D100	4-ch Video capture (NTSC/PAL) module
D120	4xCOM port module (4x RS232/RS422 module)
WCDMA-002	Quad-Band 3G (WCDMA) module + Antenna

[NSD2510 Dimension]



(unit: mm)

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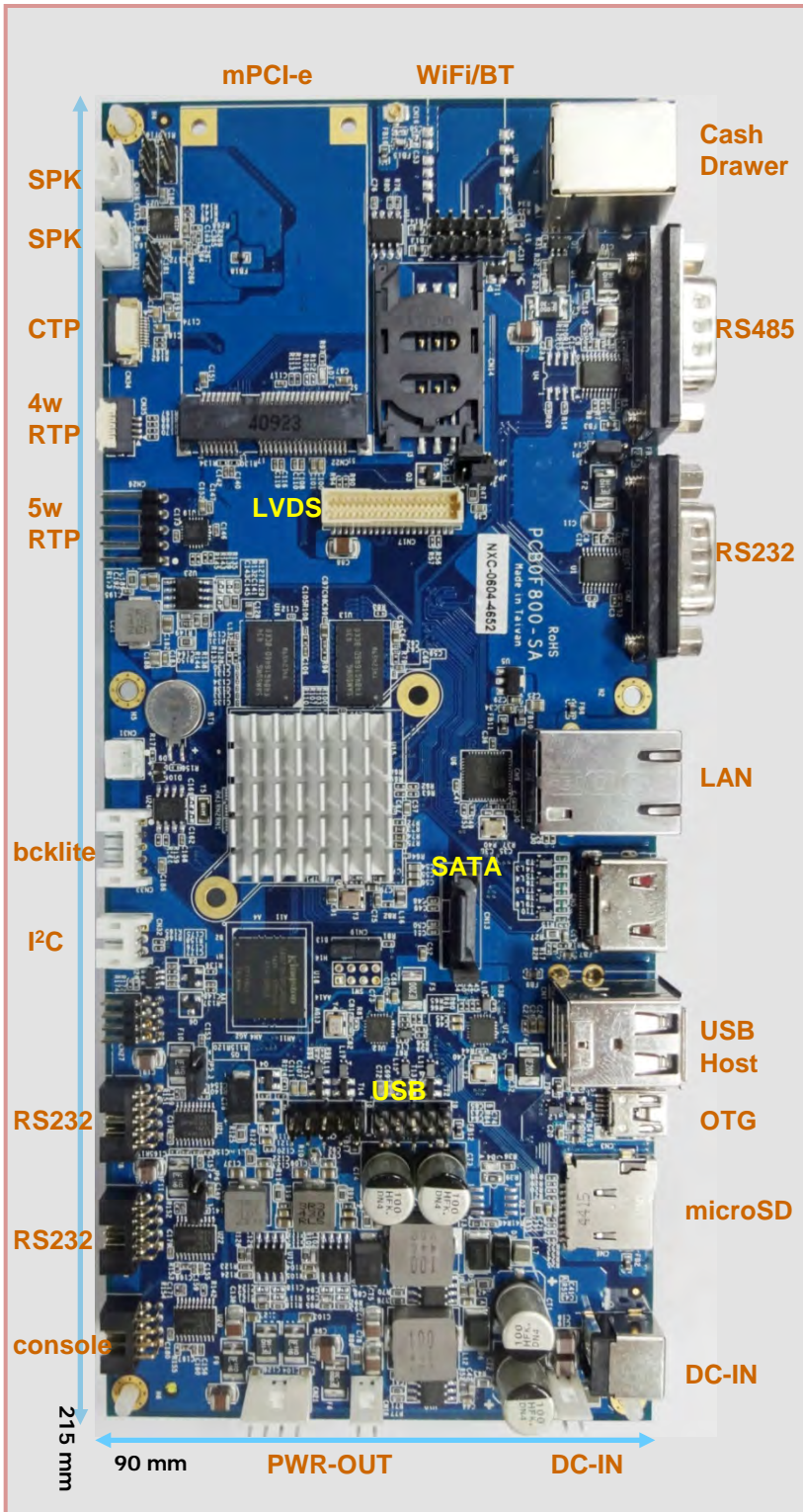
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[NSD2110 Ordering Information]

Part No.	OS	CPU	RAM	CAN Bus	GPIO	Voltage Protection	Common Specifications
NSD2510WX-SUC	Ubuntu	iMX6S Single-Core	1GB DDR3	NO	8-bit	NO	See specification table in previous page
NSD2510WX-SAC	Android						
NSD2510WX-SUC-V	Ubuntu			YES	16-bit	YES	
NSD2510WX-SAC-V	Android						

[Optional Modules]

Part No.	Description
WLS-006	(RTL8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse)
D100	4-ch Video capture (NTSC/PAL) module
D120	4xCOM port module (4x RS232/RS422 module)
WCDMA-002	Quad-Band 3G (WCDMA) module + Antenna

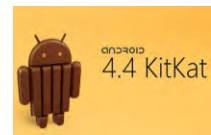


Product Features:

- High-performance and low power ARM Cortex-A9 quad-core single board computer for POS applications
- Dual channel LVDS to drive up to 1920x1080 LCD
- I²C master port for external peripheral expansion
- 4x RS232 port with power pin
- 1x RS485 port (can be configured to RS232)
- 7x USB 2.0 host ports
- Multiple touch screen interfaces (capacitive, 4-wire resistive, 5-wire resistive)
- 24V power input
- Quad-band (3G) module (optional)
- WiFi and Bluetooth BLE module (optional)
- Dimension: 215mmx 90mm



yocto PROJECT



SBC-POS Typical Applications

- POS
- KIOSKs
- Thin Client
- Data logger
- Industrial Equipment

SBC-POS Specifications

CPU	Freescale iMX6 Quad / DualLite ARM Cortex™-A9 @ 1GHz	Storage	1 × microSD card slot
			1 × SATA 2Gb/s (Quad-core only)
RAM	1GB DDR3 (Dual-core)	I/O Interfaces	1x miniPCI-e connector (for 3G module)
NAND Flash	4GB flash (eMMC)		1 × USB2.0 OTG port (Mini-B connector)
Touch Screen Interface	1 × capacitive touch screen connector		3 × RS-232 port (DB9 or pin header)
	1 × 4-wire resistive touch connector		1 × RS-485 port (DB9 connector)
	1 × 5-wire resistive touch connector		1 × console port (pin header)
Touch Interface	1 × LVDS connector (2-channel)		5 × USB 2.0 host ports (pin header)
Audio Interface	1 × mic , 1 × headphone, 1 x Line-in		2 × USB 2.0 host ports (type A connectors)
	2 × (L/R) speaker connector	1 × I ² C master port	
Network	1 × 10/100 /1Gb Ethernet (RJ-45)	Power Input	DC +24 V / 1.5A
OS supported	Android 4.x / Linux 3.10 / Ubuntu / Yocto	Dimension	215 mm × 90 mm × 21 mm
		Weight	Approx. 153g
		Environment	Operating temperature: -20°C to 70°C

SBC-POS Ordering Information

(** Note: Not all models are available now. Contact our sales representative for more details.)

Part No.	OS	CPU	Common Specifications
SBC-POS-QU	Linux	iMX6Q Quad	1GB RAM / 4GB NAND Flash Touch screen interfaces(resistive/capacitive) LVDS, Audio / MicroSD / SATA LAN / USB host / USB OTG RS232 / RS485
SBC-POS-QA	Android		
SBC-POS-LU	Linux	iMX6D DualLite	
SBC-POS-LA	Android		

SBC-POS Optional Products:

Part No.	Description
PWR-002	+24V @ 1.5A DC power adapter
CAB-001	(2x4-pin-to-DB9) RS232 cable for console port
WLS-006	(BL-8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse)
WCDMA-002	Quad Band 3G (WCDMA) module (w GPS) + 3G Antenna