

TEP-1010-IMX6



- The TEP-1010-IMX6 is a scalable multimedia HMI based on an NXP i.MX6 Solo, DualLite, or Quad multicore Cortex-A9™ processor supporting 2D/3D graphic applications.
- The TEP-1010-IMX6 features a 10.1-inch widescreen ratio multitouch PCAP touch screen with LED backlight and brushed aluminum front bezel.
- Edge-computing ready with internal mini-PCIe expansion + SIM Card slot for LTE/5G cloud connectivity.
- Orderable with single voltage 12VDC, wide voltage 9 - 36VDC or 802.3.at PoE (power over ethernet) options and GPIO, UART, CAN interfaces (optional galvanic isolated). HDMI and VGA secondary display support.
- Linux, Yocto, Android runtime images and full source code available.

Specifications



yocto
PROJECT



Core System

Processor	NXP i.MX6 Solo NXP i.MX6 DualLite NXP i.MX6 Quad
Architecture	ARM Cortex-A9
PMIC	NXP MMPF0100
Memory	Up to 2GB DDR3
Storage	eMMC (4GB Default)

Connectivity

Network LAN	1x Atheros AR8035 Gigabit LAN
Power over Ethernet	PoE function 802.3at (optional)

Expansion Interfaces

Expansion Slots	2x M.2 slot 2x mini-PCIe with SIM Card slot
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External Connectors

External Display	1x HDMI 1x VGA 15-pin D-SUB
Audio Connectors	1x 3.5mm jack Microphone 1x 3.5mm jack Stereo Audio in 1x 3.5mm jack Stereo Audio out
Network	1x RJ45
USB	1x USB 2.0 OTG (Type-C) 4x USB 2.0 Host
CAN Bus	2x Flex CAN version 2.0B compliant
Serial	2x RS-232
GPIO	8x GPIO
Buttons	1x Boot Select 1x Reset
Indicators	1x Programmable LED
SIM Cardslot	1x Micro-SIM /1x Mini-SIM Card slot
SD Cardslot	1x MicroSD Card slot

Display

LCD	10.1 inch widescreen LCD with LED backlight
Resolution	1280 x 800 pixels
Luminance	350 cd/m ²
Maximum Colors	16.7 million
Touchscreen	Projective Capacitive (multitouch)

Video

Video Decode	1080p30 + D1 (Solo/DualLite) 1080p60 H.264 (Quad)
Video Encode	1080p30 H.264 BP/Dual 720p

Audio

Audio Codec	NXP SGT5000
Internal Speaker	2x 2W/8Ω Stereo Speaker (optional)

Power Specifications

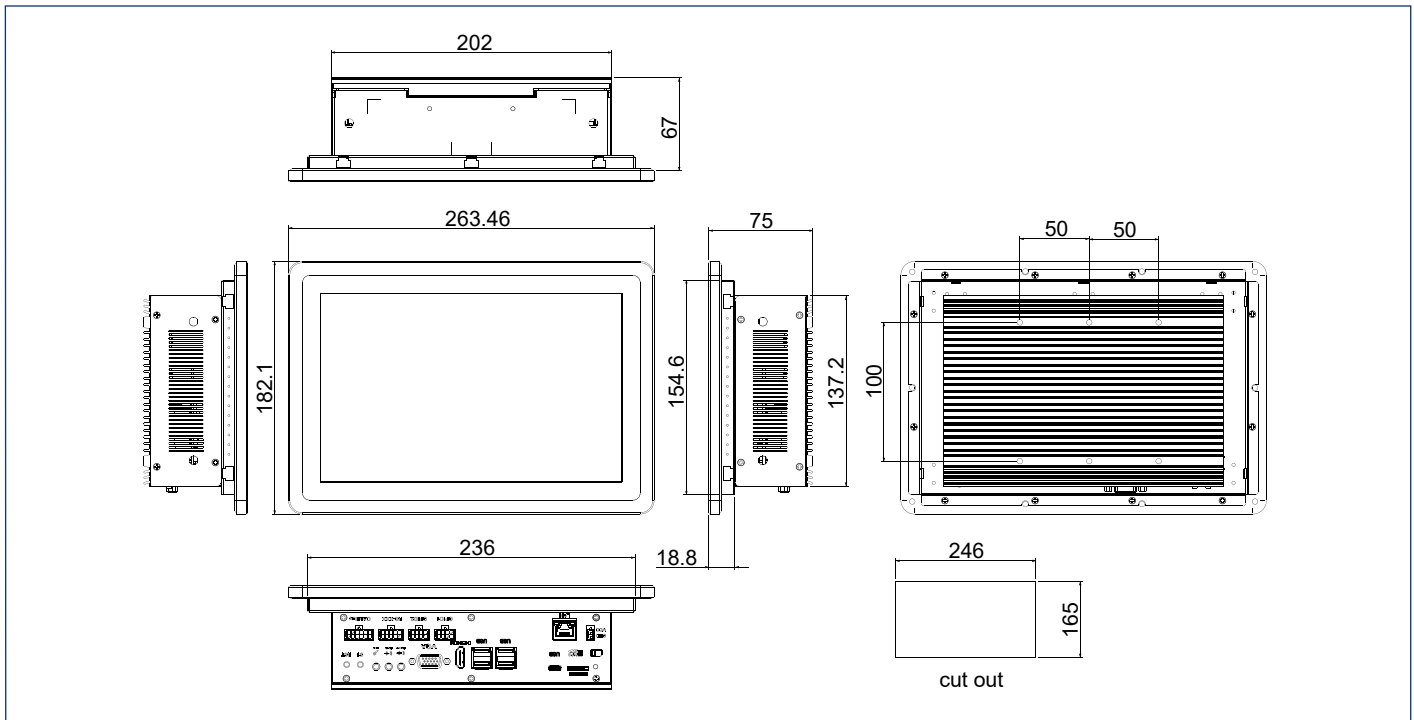
Power Input	Available with 12V 9-36V (wide power input)
Power over Ethernet	PoE function 802.3at (optional)
Power Connector	2-pin Micro-Fit 3.0
Power Consumption	Depending on Configuration

Operation Systems

Standard Support	Linux Yocto Android
Extended Support	Commercial Linux

Dimensions

(units in mm)



Environmental and Mechanical

Enclosure Material	Metal
Front Bezel	Brushed Anodized Aluminium
IP Rating	IP65 Front
Dimensions	263 (W) x 182 (H) x 75 (D) mm
Weight	1900 grams
Temperature	Commercial: 0° to +50°C
Relative Humidity	10 to 90 %
MTBF	50 000 Hours
Shock	15G half-sine 11 ms duration
Vibration	1 Grms random 5-500Hz hr/axis
Certification	Compliant with CE / FCC / RoHS / REACH directives

Modular Expansion Options

Power Expansion Module	TXB-P1-12V-LAN1 (12V 3A) TXB-P1-1030V-LAN1 (9-36V 5A) TXB-P1-12V-POE1 (12V 3A) or (PoE 802.3at)
I/O Expansion Module	TXB-I2-GS2-GC2-GG8 (Galvanic Isolated) 2x RS-232 + 2x CAN + 8x GPIO TXB-I2-S2-C2-G8 2x RS-232 + 2x CAN + 8x GPIO

Mounting Options

Rear Mounting	7 mounting clips required (included)
VESA Mounting	100*100 VESA MIS-D Standard (separate purchase)
Surface Mounting	10 mounting holes

Ordering Information

TEP1010-IMX6x-Rxx-Exx-Lxxx-Xxxx-xxx-xxxx-xxxx

	Code	Description
Processor	IMX6S	NXP i.MX6Solo
	IMX6U	NXP i.MX6DualLite
	IMX6Q	NXP i.MX6Quad
Memory	R05	512MB DDR3
	R10	1GB DDR3
	R20	2GB DDR3
Storage	E04	eMMC capacity in Gigabytes E04 = 4GB / E16 = 16GB / E32 = 32GB / E64 = 64GB
	L112	TXB-P1-12V-LAN1 (12V 3A)
Power Expansion	L130	TXB-P1-1030V-LAN1 (9-36V 5A)
	LPOE	TXB-P1-12V-POE1 (12V 3A) or (PoE 802.3at)
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I/O Expansion	-	-
	XS20	2x RS-232 + 2x CAN + 8x GPIO
	XG20	2x RS-232 + 2x CAN + 8x GPIO (Galvanic Isolated)
Internal Speaker	-	-
Custom ID	SPK	2x 2W/8Ω Stereo Speaker
	XXXX	Custom Part number ID for customized Software loader and special component (BOM)