The Company

Beijer Electronics AB
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www.beijerelectronics.com

Products

General

The products are CE-labeled. The products meet the requirements of the RoHS Directive (EU directive 2011/65/EC) and REACH Directive (No 1907/2006)

Mechanicals

Aluminum and stainless steel are judged to be environmentally non-hazardous. Expanded rubber packing for the front, expanded polyethylene packing for the display with adhesive that is not classified as environmentally hazardous. Screws may have the following surface treatments: Bright nickel-plated or bright zinc-plated. Any display frame and the CF cover are made of halogen-free plastic, PC/ABS.

Electronics

Circuit boards

The majority of the components on the circuit boards are surface mount, which use less solder compared to through-hole mount components. All materials and components are RoHS compliant.

Display

The liquid crystals in the display are cyclohexane compounds. The backlight uses LED technology.

Batteries

The product contains a poly-carbonmonofluoride Lithium battery (CR2032).

Documentation

Product documentation is available in digital form on the Beijer Electronics website, *www.beijerelectronics.com*

Distribution

The packaging consists of 91% wood fiber and 7% bleached new fiber (oxygen and chlorine dioxide bleach). A white coating on the inside and outside consists of starch. The glue for the packaging is made from wheat or corn starch. Inside the packaging is a plastic bag for brackets or other mounting hardware.

Use

The products are tested and comply with the EMC requirements as per directive 2014/30/EC. The products require no special maintenance. The products produce no noise.

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Environmental Impact Report

Recycling

The products consist largely of aluminum. It is a great advantage from the viewpoint of both resources and the environment if this can be recycled. Make sure that the worn out product goes to a facility for electronic scrap. Beijer Electronics' electronic waste is recycled.. Any plastic frame must be sorted as solid plastic. The circuit board contains many valuable metals and should therefore be recycled. Remove the lithium battery. Electrolytic capacitors and displays are currently not classified as hazardous waste, but may be harmful to health and the environment. The packaging is made from wood fiber and should be recycled. The label and the plastic bag for the brackets are sorted as soft plastic.The protective film on the front is sorted as soft plastic. When the product is no longer useful it can be returned to Beijer Electronics for environmentally responsible recycling. Contact the company for further information.

Environmental Impact

A product has an impact on the environment throughout its entire life cycle. An operator panel impacts on the environment through its function, i.e. controlling industrial equipment. The energy and the scrapped parts that can be saved with efficient controls mean that the product contributes to a reduced environmental burden. Other important environmental impact factors are the energy the product consumes during use, as well as the non-renewable raw materials in the form of metals, etc. that are included in the product and which are obtained using environmentally harmful mining.

Opportunities to reduce environmental burden during use

– Switch the system off when it is not in use.
– Use green electricity.
– Use energy-saving options, e.g. turn off backlighting to save energy and reduce wear on the backlight.
– If possible, reduce the brightness of the backlighting to reduce energy consumption.
– Ensure that the product, battery and packaging are recycled in an environmentally responsible way.

Product Specifications

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X2 base v2 Products

X2 base 5 v2	MAEN328 Installation manual
X2 base 7 v2	MAEN329 Installation manual
X2 base 7 v2 HP	MAEN330 Installation manual
X2 base 10 v2	MAEN331 Installation manual
X2 base 10 v2 HP	MAEN332 Installation manual
X2 base 15 v2 HP	MAEN333 Installation manual

Datasheet   X2 base 5 v2

Parameter	X2 base 5 v2
Frontpanel, W×H×D	172x109x37 mm
Cut out dimensions, W×H	161x93 (+/-1) mm
Mounting depth	32 mm (132 mm including clearance)
Mounting	Switchboard installation
Front panel seal	IP 65
Rear panel seal	IP 20
Touch screen material	Polyester on glass, ITO film, resistive
Frame Overlay	Autoflex EBA 180L
Touch screen operations	1million finger touch operations
Reverse side material	Plastic
Frame material	Plastic
Weight	0.32 kg
COM-A	Standard DSUB (9-pin, female). 1x RS232 RX/TXwith RTS/CTS 1x RS422 or 2x RS485
COM-B	N/A
COM-C	3 pin screw connector 1x RS485
Ethernet LAN A	10/100 Mbit/s. Shielded RJ 45
Ethernet LAN B	N/A
USB-A	1 × USB Host 2.0, max output 500 mA
USB-B	N/A
External storage media	N/A
Flash memory (application memory)	2 GB
Memory RAM	512 MB (DDR3)
NVRAM	N/A
CPU	TI Sitara AM335x Single Core 600MHz, (TI AM3352BZCZ60 Single Core 600MHz)
LED	N/A
Real time clock	Yes
Battery	Lithium battery type CR 2032, exchangeable

Power consumption at rated voltage	4.8 W
Fuse	Internal DC fuse, 3 AT, SMD
Power supply	+24 VDC (18-32 V DC), isolated CE: The external power supply must conform with the requirements according to IEC 62368-1 and IEC 61558-2-4. UL and cUL: The power supply must conform with the Requirements for class II power supplies.
Display	5.0" TFT-LCD with LED backlight. 800x480 pixels, 16.7M colors
Active area of display, W×H	108.00 x 64.80
Pixel errors	Class I, according to ISO 9241-307
Backlight Brightness	250 cd/m2
Backlight Lifetime	20000 hours
Operating temperature	0 ˚C – +50 ˚C
Storage temperature	-20 ˚C – +60 ˚C
Relative humidity	5 - 90% non-condensed /25˚C
Vibration	1g, according to IEC 60068-2-6, Test Fc
Mechanical Shock	10g, half-sine, 6ms according to IEC60068-2-27
Approvals and certifications	CE/FCC/KCC Information is available on the web site www.beijerelectronics.com
UL approval	Yes, information available at UL.com

Datasheet X2 base 7 v2, X2 base 7 v2 HP

Parameter	X2 base 7 v2	X2 base 7 v2 HP
Frontpanel, W×H×D	202x152x37 mm	
Cut out dimensions, W×H	186x136 (+/-1) mm	
Mounting depth	32 mm (132 mm including clearance)	
Mounting	Switchboard installation	
Front panel seal	IP 65	
Rear panel seal	IP 20	
Touch screen material	Polyester on glass, ITO film, resistive	
Frame Overlay	Autoflex EBA 180L	
Touch screen operations	1million finger touch operations	
Reverse side material	Plastic	
Frame material	Plastic	
Weight	0.56 kg	0.58 kg
COM-A	Standard DSUB (9-pin, female). 1x RS232 RX/TXwith RTS/CTS 1x RS422 or 2x RS485	

COM-B	N/A	Standard DSUB (9-pin, female). 1x RS232 RX/TXwith RTS/CTS 1x RS422 or 1x RS485
COM-C	3 pin screw connector 1x RS485	
Ethernet LAN A	10/100 Mbit/s. Shielded RJ 45	10/100 Mbit/s. Shielded RJ 45
Ethernet LAN B	N/A	10/100 Mbit/s. Shielded RJ 45
USB-A	1 × USB Host 2.0, max output 500 mA	
USB-B	N/A	1 × USB Host 2.0, max output 500 mA
External storage media	N/A	1 × µSD card.
Flash memory (application memory)	2 GB	2 GB
Memory RAM	512 MB (DDR3)	512 MB (DDR3)
NVRAM	N/A	16 kB
CPU	TI Sitara AM335x Single Core 600MHz, (TI AM3352BZCZ60 Single Core 600MHz)	TI Sitara AM335x Single Core 1GHz, (TI AM3352BZCZ100 Single Core 1GHz)
LED	N/A	
Real time clock	Yes	
Battery	Lithium battery type CR 2032, exchangeable	
Power consumption at rated voltage	5.6 W	7.2 W
Fuse	Internal DC fuse, 3 AT, SMD	
Power supply	+24 VDC (18-32 V DC), isolated CE: The external power supply must conform with the requirements according to IEC 62368-1 and IEC 61558-2-4. UL and cUL: The power supply must conform with the Requirements for class II power supplies.	
Display	7.0" TFT-LCD with LED backlight. 800x480 pixels, 16M colors	
Active area of display, W×H	154.08 x 85.92	
Pixel errors	Class I, according to ISO 9241-307	
Backlight Brightness	400 cd/m2	
Backlight Lifetime	20000 hours	
Operating temperature	0 ˚C – +50 ˚C	
Storage temperature	-20 ˚C – +60 ˚C	
Relative humidity	5 - 90% non-condensed /25˚C	
Vibration	1g, according to IEC 60068-2-6, Test Fc	
Mechanical Shock	10g, half-sine, 6ms according to IEC60068-2-27	
Approvals and certifications	CE/FCC/KCC Information is available on the web site www.beijerelectronics.com	
UL approval	Yes, information available at UL.com	

Datasheet — X2 base 10 v2, / X2 base 10 v2 HP

Parameter	X2 base 10 v2	X2 base 10 v2 HP
Frontpanel, W×H×D	290x193x40 mm	
Cut out dimensions, W×H	275x177 (+/-1) mm	
Mounting depth	35 mm (135 mm including clearance)	
Mounting	Switchboard installation	
Front panel seal	IP 65	
Rear panel seal	IP 20	
Touch screen material	Polyester on glass, ITO film, resistive	
Frame Overlay	Autoflex EBA 180L	
Touch screen operations	1million finger touch operations	
Reverse side material	Plastic	
Frame material	Plastic	
Weight	0.84 kg	0.86 kg
COM-A	Standard DSUB (9-pin, female). 1x RS232 RX/TXwith RTS/CTS 1x RS422 or 2x RS485	
COM-B	N/A	Standard DSUB (9-pin, female). 1x RS232 RX/TXwith RTS/CTS 1x RS422 or 1x RS485
COM-C	3 pin screw connector 1x RS485	
Ethernet LAN A	10/100 Mbit/s. Shielded RJ 45	10/100 Mbit/s. Shielded RJ 45
Ethernet LAN B	N/A	10/100 Mbit/s. Shielded RJ 45
USB-A	1 × USB Host 2.0, max output 500 mA	
USB-B	N/A	1 × USB Host 2.0, max output 500 mA
External storage media	N/A	1 × µSD card.
Flash memory (application memory)	2 GB	2 GB
Memory RAM	512 MB (DDR3)	512 MB (DDR3)
NVRAM	N/A	16 kB
CPU	TI Sitara AM335x Single Core 600MHz, (TI AM3352BZCZ60 Single Core 600MHz)	TI Sitara AM335x Single Core 1GHz, (TI AM3352BZCZ100 Single Core 1GHz)
LED	N/A	
Real time clock	Yes	
Battery	Lithium battery type CR 2032, exchangeable	
Power consumption at rated voltage	6.9 W	8.1 W

Fuse	Internal DC fuse, 3 AT, SMD
Power supply	+24 VDC (18-32 V DC), isolated CE: The external power supply must conform with the requirements according to IEC 62368-1 and IEC 61558-2-4. UL and cUL: The power supply must conform with the Requirements for class II power supplies.
Display	10.1" TFT-LCD with LED backlight. 1024x600 pixels, 16.7M colors
Active area of display, W×H	222.72 x 125.28
Pixel errors	Class I, according to ISO 9241-307
Backlight Brightness	350 cd/m2
Backlight Lifetime	30000 hours
Operating temperature	0 °C – +50 °C
Storage temperature	-20 °C – +60 °C
Relative humidity	5 - 90% non-condensed /25°C
Vibration	1g, according to IEC 60068-2-6, Test Fc
Mechanical Shock	10g, half-sine, 6ms according to IEC60068-2-27
Approvals and certifications	CE/FCC/KCC Information is available on the web site www.beijerelectronics.com
UL approval	Yes, information available at UL.com

Datasheet   X2 base 15 v2 HP

Parameter	X2 base 15 v2 HP
Frontpanel, W×H×D	409x270x43 mm
Cut out dimensions, W×H	*393x254* (+/-1) mm
Mounting depth	38 mm (138 mm including clearance)
Mounting	Switchboard installation
Front panel seal	IP 65
Rear panel seal	IP 20
Touch screen material	Polyester on glass, ITO film, resistive
Frame Overlay	Autoflex EBA 250
Touch screen operations	1million finger touch operations
Reverse side material	Plastic
Frame material	Plastic
Weight	2.46 kg

COM-A	Standard DSUB (9-pin, female). 1x RS232 RX/TXwith RTS/CTS 1x RS422 or 2x RS485
COM-B	Standard DSUB (9-pin, female). 1x RS232 RX/TXwith RTS/CTS 1x RS422 or 1x RS485
COM-C	3 pin screw connector 1x RS485
Ethernet LAN A	10/100 Mbit/s. Shielded RJ 45
Ethernet LAN B	10/100 Mbit/s. Shielded RJ 45
USB-A	1 × USB Host 2.0, max output 500 mA
USB-B	1 × USB Host 2.0, max output 500 mA
External storage media	1 × µSD card.
Flash memory (application memory)	2 GB
Memory RAM	512 MB (DDR3)
NVRAM	16 kB
CPU	TI Sitara AM335x Single Core 1GHz, (TI AM3352BZCZ100 Single Core 1GHz)
LED	N/A
Real time clock	Yes
Battery	Lithium battery type CR 2032, exchangeable
Power consumption at rated voltage	17.8 W
Fuse	Internal DC fuse, 3 AT, SMD
Power supply	+24 VDC (18-32 V DC), isolated CE: The external power supply must conform with the requirements according to IEC 62368-1 and IEC 61558-2-4. UL and cUL: The power supply must conform with the Requirements for class II power supplies.
Display	15.6" TFT-LCD with LED backlight. 1360x768 pixels, 262k colors
Active area of display, W×H	344.23 x 193.53 mm
Pixel errors	Class I, according to ISO 9241-307
Backlight Brightness	300 cd/m2
Backlight Lifetime	50000 hours
Operating temperature	0 ˚C – +50 ˚C
Storage temperature	-20 ˚C – +60 ˚C
Relative humidity	5 - 90% non-condensed /25˚C
Vibration	1g, according to IEC 60068-2-6, Test Fc
Mechanical Shock	10g, half-sine, 6ms according to IEC60068-2-27

Approvals and certifications	CE/FCC/KCC Information is available on the web site www.beijerelectronics.com
UL approval	Yes, information available at UL.com

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