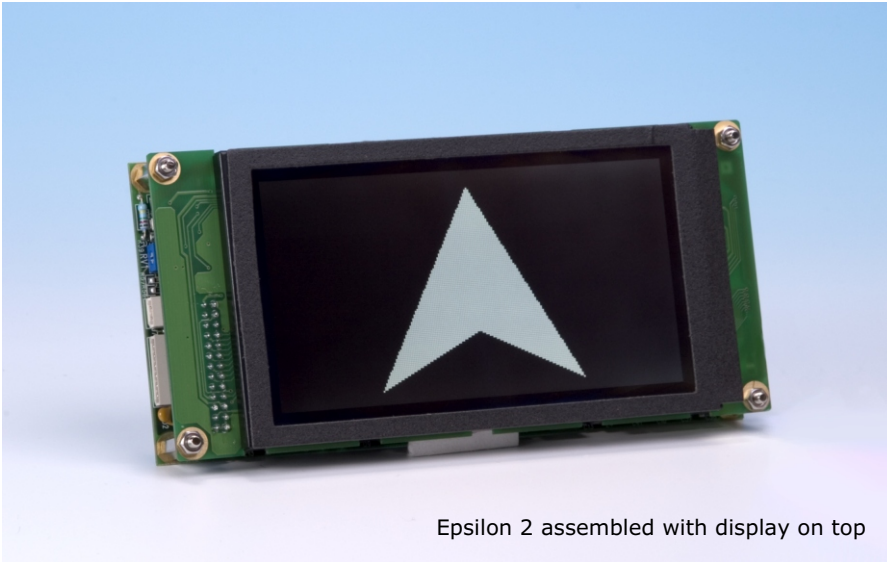


Intelligent Display Unit

Epsilon 2 Lift Display



Epsilon 2 assembled with display on top

Epsilon 2 is an intelligent display unit. It is intended to be used as a landing display and inside elevator cars to display direction information, floor numbers and other information for passengers.

The graphical display used is a liquid crystal display (LCD) of 240x128 pixels. The unit has two communication ports and a control for two single lanterns or one combined lantern.

Epsilon 2 offers a wide range of features to meet customer's requirements:

- Customizable LCD display with positive and negative modes
- Wide viewing angle
- White LED back light; no more need for back light change
- High reliability, verified by an accelerated aging test
- Slim design saves valuable space
- SPI and RS de facto communication standards; other standards available by request
- Multi-frequency gong
- External lantern control
- Cost-effective design
- Flexible SW design
- Processing capacity enables running of intelligent applications
- Small power consumption

SPECIFICATION

Architecture

Processor: Intel 80188 architecture, 20MHz clock

Display

Type Graphical Liquid Crystal Display,
Negative transmissive
Resolution 240*128 dots
Display active area 107.97*57.57 mm
Dot size 0.42*0.42 mm, dot pitch 0.45*0.45 mm
Viewing direction 6 o'clock
Back light, White LEDS
Reliable Zebra technology used instead of heat-seal in internal display connectors

Audible Gong

Tone 1, 1200 Hz
Tone 2, 1000/833 Hz
Tone 3, 1200/1000/800 Hz
Gong volume adjustable 35-70dB (bare board)

Interfaces

SPI
Communication standard: LON Neurowire (SPI)
I/O Object, receive only
Baud Rate: 1-20 kBaud
Connector: Molex 5268-NA-5 (SPOX)

RS-232
Communication standard: RS-232 using TxD,
RxD and GND
Baud Rate: 9600, parity none, 8-bit data, 1-stop
Connector: 2.54 mm pitch 3-pin header

Lantern Outputs

Output Voltage: Panel input voltage or 24 V
(whichever is less)
Current Maximum: Collectively limited by 250
mA resetting thermofuse
Each output limited by 100 mA resetting
thermofuse

Memory

RAM memory: 4Mbit on-board Static RAM
(512k*8bit)
Program memory 4Mbit on-board Flash ROM
(512k*8bit)

Power Supply

Input Voltage: 24 VDC \pm 25%
Current maximum: 0,5 A (including lamp output
current)
Current typical: 80 mA (no lamps, no gong on)

Environmental Specifications

Operating Temperature: 0 ... +50C
Storage Temperature: -20 ... +70C
Humidity: 98% @40C non-condensing
Vibration: IEC 60068-2-6-Fc
EMC emission: EN 12015 (1998)
EMC susceptibility: EN 12016 (1998)

Mechanical Specifications

Epsilon2 PCB: 160 mm x 76 mm x 12 mm
Display: 160 mm x 76 mm x 13 mm

The PCB and display may be used either with the
display mounted on top or with the units mounted
side by side.

The display is connected to the Epsilon2 PCB with
a flat cable (normal length 260 mm).

Ordering reference

10211 Epsilon 2 Lift Display



GENERA OY

Niittylänpolku 16 Box 16 - FIN-00621 Helsinki, Finland
Tel. +358 20 7450300 - Fax +358 20 7450360 - info@genera.fi - www.genera.fi