

PRD10805 – MONITOR TFT 15.6" FASTON 24V FIT LC (FNI - EVOI) DATASHEET



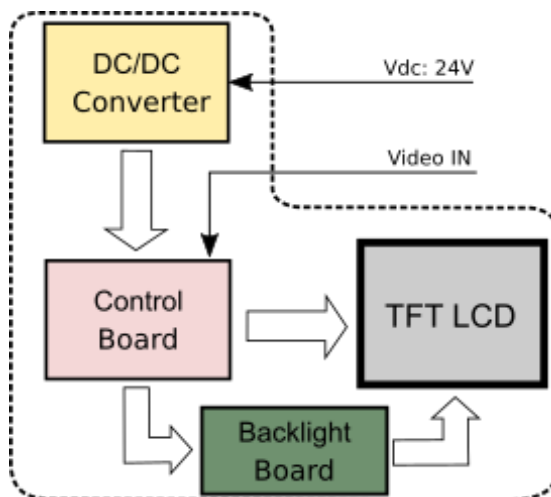
DESCRIPTION

The 15.6" monitor has the most advanced technology when it comes to image, it being composed of the amorphous silicon thin film transistor liquid crystal display (a-Si TFT LCD) panel structure with driver Large-scale integration (LSI) for driving the TFT array and the LED backlight. It was specifically designed, qualified and supported for use in automotive applications. The display supports the 1366 (H) x 768 (V) screen format and 262k colors (6-bit RGB data input). Its high resolution and wide viewing angle, allied with LED backlight cutting edge technology are differentials in this product.

FEATURES

- 15.6" High resolution active matrix LCD;
- LED backlight system;
- Grey case;
- Full HD resolution (1366 x 768);
- Wide viewing angle;
- 6-bit of support color (262k colors RGB);
- Auto ON/OFF in presence/absence of video signal;
- Protective glass;
- Overcurrent and overvoltage protection;
- Inverted power supply protection;
- Compact and innovative design;
- Easy to install on every automotive video system.

BLOCK DIAGRAM



| | By | Date | MONITOR TFT 15.6" FASTON 24V FIT LC (FNI - EVOI) | Ref. ACTIA | Index |
|-------|------------|------------|--|-----------------|--------------|
| Draw | C. Dambroz | 08/28/2019 | | PRD10805 | Rev00 |
| Rev. | C. Dambroz | 08/28/2019 | | | |
| Appr. | C. Dambroz | 08/28/2019 | | | Page 1/4 |

TECHNICAL DATA

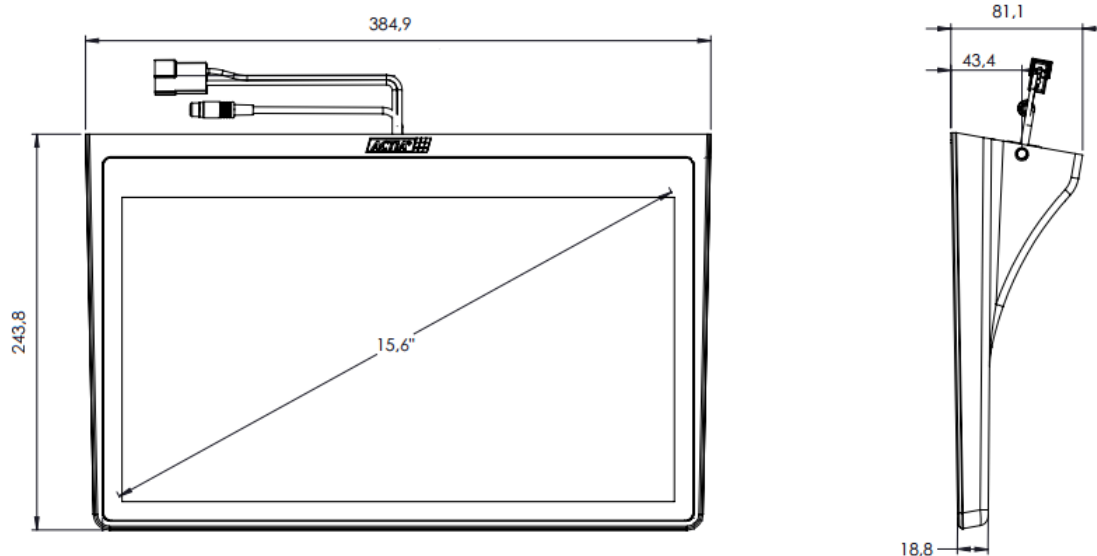
| PARAMETER | MIN | TYP | MAX | UNIT |
|----------------------------------|-------------------------|-----|-----|-------------------|
| Supply voltage range | 18 | 24 | 32 | Vdc |
| Power consumption (operation) | - | 6.5 | 6.7 | W |
| Power consumption (standby) | - | 3.6 | 3.8 | W |
| Current Consumption (standby) | - | 150 | - | mA |
| Current Consumption (operation) | 210 | 270 | 370 | mA |
| Luminance | - | 220 | - | cd/m ² |
| Contrast Ratio | - | 500 | - | - |
| Viewing angle CR=10 (horizontal) | | ±45 | - | ° |
| Viewing angle CR=10 (vertical) | -20 | - | +40 | ° |
| Operating temperature range | 0 | - | 50 | °C |
| Storage temperature range | -20 | - | 60 | °C |
| Life Time | 15000 | | | - |
| Degree of protection | IP20 | | | - |
| Video System | PAL / NSTC | | | - |
| Video Input signal | CVBS / 1.0Vpp @ 75ohm | | | - |
| Aspect Ratio | 16:9 | | | - |
| Screen resolution | 1366 x 768 | | | pixels |
| Pixel Pitch | 252 x 252 | | | µm |
| Number of colors | 262k colors (RGB 6-bit) | | | - |
| Weight | 2.8 | | | Kg |

| RELIABILITY TESTS | |
|--------------------------|---|
| Thermal Shock | ANSI/ASAE EP455 - 5.1.3 -40°C to 70°C at rate of 4°C/min. (1 hour each extremes). |
| Salt Spray | SAEJ1455 – 4.3 (ASTM B117). 48 hours of application. |
| Vibration, Random | SAE J1455 – 9.4.4.2 8 hours each axis @ 50°C (5Hz to 600Hz). |
| Shock/Crash safety | ANSI/ASAE EP455 – 5.14.1 A single 11ms half sine pulse of 490m/s ² on the function axe. |
| Overvoltage | 36V for 60min. |
| Reverse Voltage | ANSI/ASAE EP455 – 5.10.4 |
| Short circuit protection | All inputs to Vdc, Ground and case for 60s. |
| Starting Profile | ISO16750- 2– 4.6.3 |
| Load Dump | ISO16750-2– 4.6.4 160V (+-10%), tr=0,1ms, td=100ms, Ua=28V. |

| | |
|--|---|
| Switching spikes - Transients | ISO7637-2 Pulse 1, 2a, 2b, 3a and 3b. |
| Superimposed alternating voltage | ISO16750-2- 4.4 - Severity 1, 2 and 3. |
| Discontinuities in supply voltage | ISO16750-2- 4.6 Usmin with 100ms drop. |

DIMENSIONS

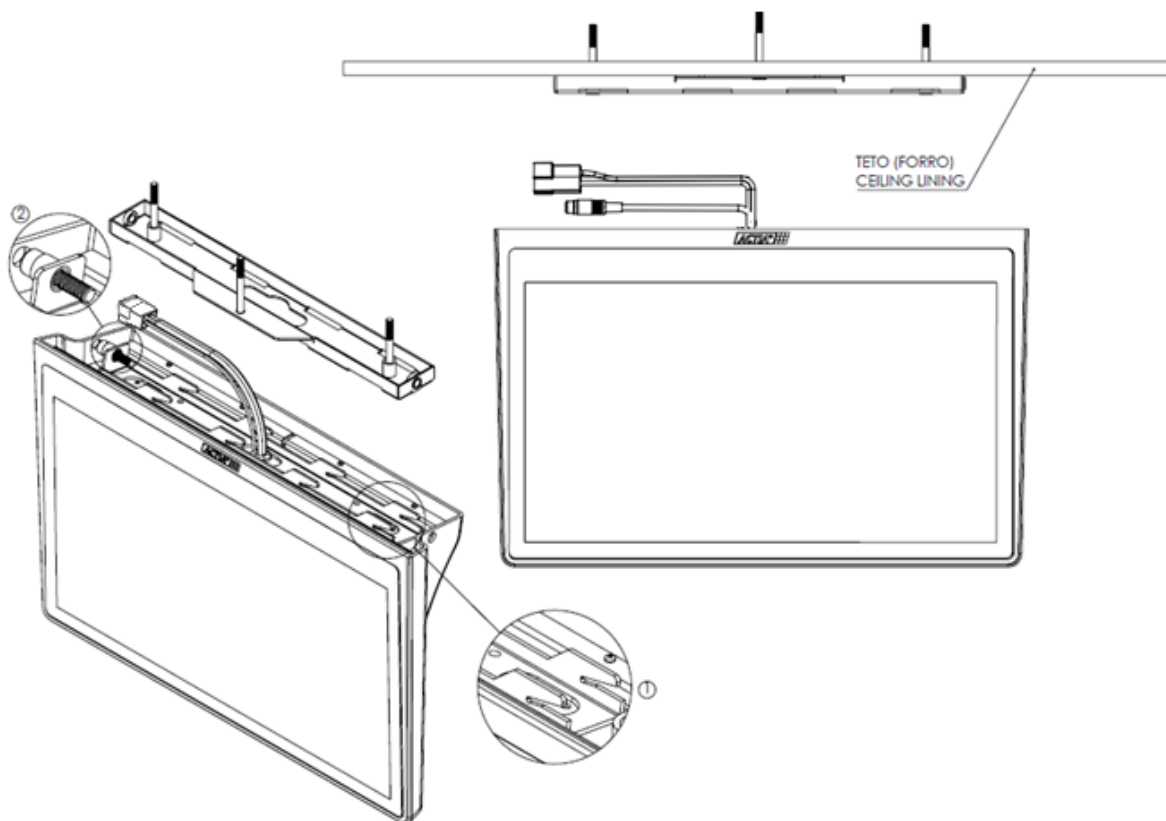
(In millimeters)



CONNECTOR DETAILS



ACCESSORIES



- 1 – Fixation by serrated metal bracket;
- 2 – System fixed by Allen screw;
- 3 – Possibility of rotating serrated metal support (1) fixing reversing position.

REVISION HISTORY

| Revision | Date | Reviewer | Description |
|-----------------|-------------|-----------------|--------------------|
| 00 | 08/28/2019 | C.Dambroz | Document creation. |