# Modular HMI

## SYS-A62-10

**Embedded Panel with 10.1” LCD display based on the Multicore NXP i.MX 6 SoC family**

## Flexible, Open-source, Industrial system

### HIGHLIGHTS

- **CPU**: Solo, Dual Lite and Quad- Core (ARM® Cortex® A9 Cores)
- **CONNECTIVITY**: Wi-Fi add-on module; up 22 GPI/Os; CAN Bus
- **GRAPHICS**: 30K hours 10.1” LVDS display with projected capacitive touchscreen integrated
- **MEMORY**: Up to 1GB DDR3L on-board

### MAIN FIELDS OF APPLICATION

- Digital Signage - Infotainment
- HMI
- Industrial Internet of Things
- Point of Sales
- Vending

### FEATURES

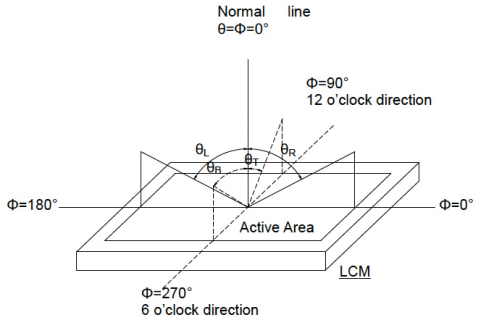
| | |
|---|---|
| Processor | Multicore NXP i.MX 6 processor family<br>**SYS-A62-10/SOLO**: i.MX6S Solo, 1 x ARM Cortex-A9 @1 GHz Core<br>**SYS-A62-10/LITE**: i.MX6DL Dual Lite, 2 x ARM Cortex-A9 @1 GHz Cores<br>**SYS-A62-10/QUAD**: i.MX6Q Quad, 4 x ARM Cortex-A9 @1 GHz Cores |
| Memory | On-board DDR3L soldered memory;<br>**SYS-A62-10/SOLO**: 512MB 32-bit<br>**SYS-A62-10/LITE**: 1GB 64-bit<br>**SYS-A62-10/QUAD**: 1GB 64-bit |
| Embedded Graphics | 2D, OpenGL® ES2.0 3D HW accelerator<br>OpenVG™ accelerator (**SYS-A62/10/QUAD** only)<br>HW encoding of MPEG-4, H.263 V2, H.264, MJPEG<br>HW decoding of MPEG-2, VC1, MPEG-4 / XviD, H.263, H.264, DivX |
| Video Section | 10,1” LVDS display, resolution 1280 x 800, 30K hours life<br>P-Cap (Projected Capacitive touch screen), with 2mm glass cover<br>Glass Hardness IK08, Surface Hardness 8H (450g) |
| Mass Storage | On-board 4GB eMMC drive<br>microSD Card Slot<br>SATA Connector (**SYS-A62-10/QUAD** only) |
| Networking | Gigabit Ethernet connector<br>Optional WiFi pluggable module |
| USB | 2 x USB 2.0 Type-A ports and 1 x USB 2.0 internal connector<br>USB micro-B Client port |
| Audio | **SYS-A62-10/LITE** and **SYS-A62-10/QUAD**: Realtek ALC655 AC’97 Audio Codec with Mic-In, Line-Out audio Jacks |
| Serial Ports | Dedicated Serial ports:<br>**SYS-A62-10/SOLO**: 2 x RS-232 ports<br>**SYS-A62-10/LITE**: 2 x RS-232 ports, 1 x CAN port<br>**SYS-A62-10/QUAD**: 2 x RS-232 ports, 1 x RS-485 port, 1 x CAN port<br>Other serial ports can be realised on expansion connector (see “Other interfaces”) |
| Other Interfaces | MIPI-CSI Camera connector<br>Programmable expansion connector with:<br>**SYS-A62-10/SOLO**: up to 22 GPIOs, 2 x TTL CAN ports, 1 x UART TTL, 3 x PWM, 2 x I2C, SD, SPI **or** S/PDIF interfaces<br>**SYS-A62-10/LITE**: up to 20 GPIOs, 1 x TTL CAN port, 1 x UART TTL, 3 x PWM, 2 x I2C, SD, SPI **or** S/PDIF interfaces<br>**SYS-A62-10/QUAD**: up to 18 GPIOs, 1 x TTL CAN port, 3 x PWM, 2 x I2C, SD, SPI **or** S/PDIF interfaces |
| Power Supply | +12$V_{DC}$<br>**SYS-A62-10/SOLO** and **SYS-A62-10/LITE**: internal i.MX6 RTC, require external battery for time/data retention<br>**SYS-A62-10/QUAD**: low power RTC with on-board battery |
| Operating System | Linux<br>Yocto<br>Windows® Embedded Compact 7 |
| Operating Temperature* | 0°C ÷ 50°C |
| Dimensions | 269,60 x 189,20 x 17,17 mm |

*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.

# SYS-A62-10

**Embedded Panel with 10.1” LCD display based on the Multicore NXP i.MX 6 SoC family**

## TFT LCD MODULE




### Display touch kit specifications

- P-Cap (Projected-Capacitive touch technology) - Glass cover
- Glass Hardness: IK08
- Surface Hardness: 8H (450g)
- Thickness: 2mm
- Optical bonding

### LCD General specifications

| Item | Specification |
|---|---|
| LCD size | 10.1 inch |
| Resolution | 1280 (RGB)X800 |
| Display mode | Normally black |
| Pixel pitch | 0.1695(W)X0.1695(H) mm |
| Active area | 216.96 (W)X135.60 (H) mm |
| Module size | 227.72(W)X147.8(H)X2.5(D)mm |
| Pixel arrangement | RGB-stripe |
| Surface Treatment | HC, Hardness 2H |
| Interface | LVDS |
| Luminance | 280cd/m^2 (MIN) 350cd/m^2 (TYP) |
| Backlight power consumption | 2.16W |
| Panel power consumption | 0.8W |

### Optical specifications

| Item | Symbol | Condition | Values (degree) | | |
|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. |
| Viewing angle (CR≥ 10) | $\theta_L$ | Φ=180° (9 o'clock) | - | 85 | - |
| | $\theta_R$ | Φ=0° (3 o'clock) | - | 85 | - |
| | $\theta_T$ | Φ=90° (12 o'clock) | - | 85 | - |
| | $\theta_B$ | Φ=270° (6 o'clock) | - | 85 | - |

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

SECO:
SYS-A62-SOLO-ISCW