

Features

- 8" TFT
- USB-C Input
- 1024x768 Resolution
- 500 cd/m² Brightness
- IPS Panel
- Full Viewing Angles
- 0°C to +70°C Operating Temperatures
- High Contrast Ratio
- 16.7M Colours
- PCAP Touch

RS PRO 8,, USB-C TFT LCD Display

RS Stock No.: 0712667



RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

This RS PRO USB-C Display is a 8" (16.9) TFT LCD Display, with a high resolution of 1024x600 (WSVGA), IPS technology and high brightness. This model is composed of:

- *A TFT LCD panel*
- *Backlight system*
- *USB-C interface*

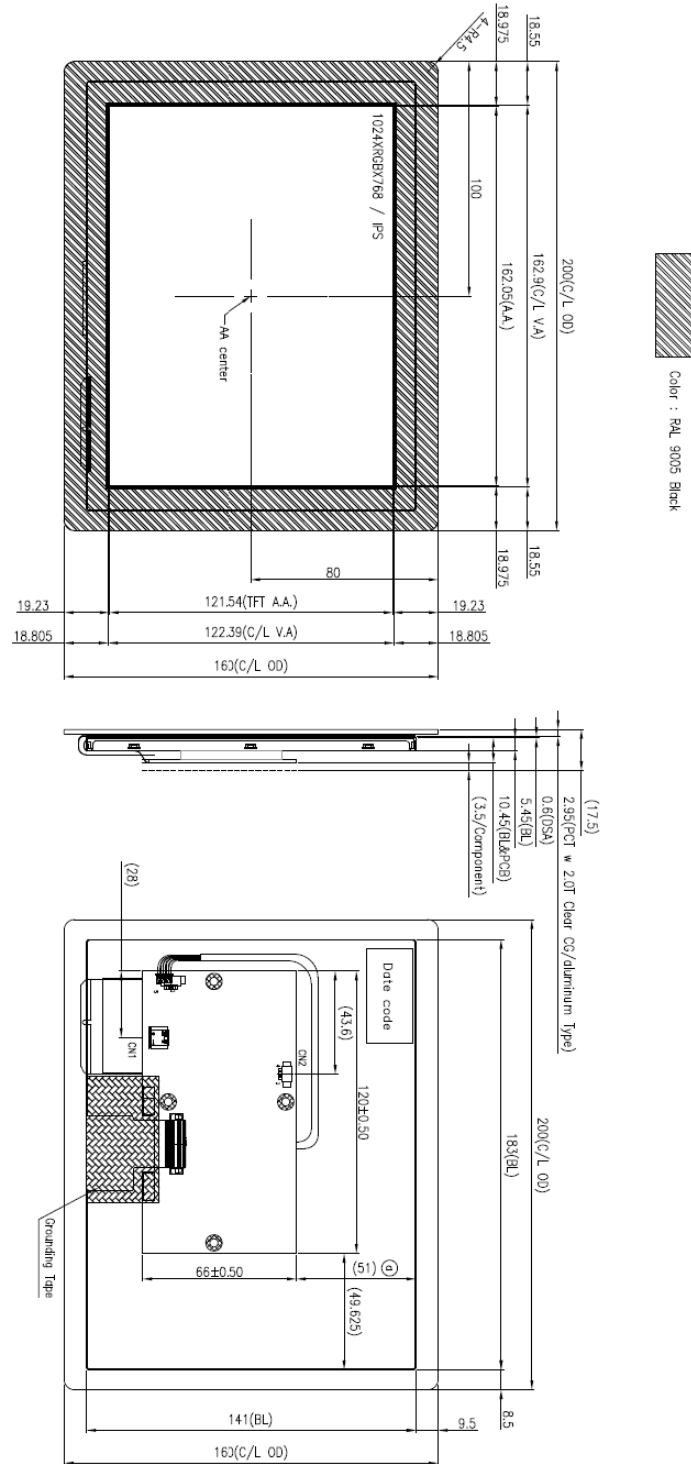
Engineered for seamless integration with embedded computing systems, this TFT display connects effortlessly to any device featuring an USB-C PD output. The single USB-C input powers the display, video and touch from a single cable. Its high-brightness screen and wide operating temperature range deliver outstanding performance in both indoor and outdoor environments, making it the perfect choice for demanding applications.

General Specifications

| | |
|------------------------------|----------------|
| Panel Size | 8 |
| Resolution | 1024x768 |
| Display Technology | IPS |
| Contrast Ratio | 600 |
| Brightness (cd/m2) | 500 |
| Video Input | USB-C |
| Operating Temperature | -0°C to +70°C |
| Storage Temperature | -30°C to +80°C |
| Touch Panel | PCAP |
| Touch Panel Interface | USB-C |

Mechanical Specifications

| | |
|--------------------------------------|------------------|
| Overall Dimensions WxHxD (mm) | 200 x 160 x 17.5 |
| Active Area WxH (mm) | 162.05 x 121.54 |



CN1 - USB-Type-C

| Pin No. | Symbol | I/O | Function |
|---------|--------|-----|--|
| A1 | GND | P | Ground |
| A2 | TX1+ | I/O | High speed data path TX for DP Alt Mode. |
| A3 | TX1- | I/O | |
| A4 | VBUS | P | Cable bus power +5V only. |
| A5 | CC1 | I/O | Type-C Port Configuration Channel |
| A6 | D+ | I/O | USB 2.0 Interface. |
| A7 | D- | I/O | |
| A8 | SBU1 | I/O | USB Type-C Sideband Use 1 |
| A9 | VBUS | P | Cable bus power +5V only. |
| A10 | RX2- | I/O | High speed data path RX for DP Alt Mode. |
| A11 | RX2+ | I/O | |
| A12 | GND | P | Ground |
| B1 | GND | P | Ground |
| B2 | TX2+ | I/O | High speed data path TX for DP Alt Mode. |
| B3 | TX2- | I/O | |
| B4 | VBUS | P | Cable bus power +5V only. |
| B5 | CC2 | I/O | Type-C Port Configuration Channel |
| B6 | D+ | I/O | USB 2.0 Interface. |
| B7 | D- | I/O | |
| B8 | SBU2 | I/O | USB Type-C Sideband Use 2 |
| B9 | VBUS | P | Cable bus power +5V only. |
| B10 | RX1- | I/O | High speed data path RX for DP Alt Mode. |
| B11 | RX1+ | I/O | |
| B12 | GND | P | Ground |

CN2 – Backlight Control – 50271-0040L-002

| Pin No. | Symbol | I/O | Function |
|---------|--------------|-----|-----------------------|
| 1 | Power on/off | I | Power On/Off control. |

| | | | |
|---|----------------------|---|----------------------|
| 2 | Brightness increased | I | Brightness Increase. |
| 3 | Brightness decrease | I | Brightness decrease. |
| 4 | GND | P | Ground |

Electrical Specifications

TFT LCD Module

| Item | Symbol | Values | | | Unit |
|------------------|--------|--------|-------|------|------|
| | | Min | Typ. | Max. | |
| Supply Voltage | VBUS | - | 5.0 | 5.5 | V |
| required current | IBUS | - | 920 | 970 | mA |
| LED life time | - | - | 50000 | - | Hr |

Optical Characteristics

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit | |
|--------------------|------------|--|---------------|-------|-------|-------------------|--|
| Brightness | -- | Note1, Note 3, ($\theta = 0^\circ$, Normal Viewing Angle) | 440 | 550 | -- | cd/m ² | |
| Uniformity | B-uni | | 70 | 75 | -- | % | |
| Contrast Ratio | CR | | 600 | 800 | -- | -- | |
| Response Time | Tr | | -- | 10 | 20 | ms | |
| | Tf | | -- | 15 | 30 | ms | |
| Color Chromaticity | White | | Wx | 0.238 | 0.288 | 0.338 | |
| | | | Wy | 0.276 | 0.326 | 0.376 | |
| View angle | Horizontal | | θ_{x+} | 75 | 85 | -- | |
| | | θ_{x-} | 75 | 85 | -- | | |

| | | | | | | | |
|--|----------|-----|--|----|----|----|--|
| | Vertical | θY+ | | 75 | 85 | -- | |
| | | θY- | | 75 | 85 | -- | |

Projected Capacitive Touch Panel

| Item | Specification | Unit |
|-----------------------------|---|--------|
| Screen Size | 8 | Inches |
| Type | Transparent Type Projected Capacitive Touch Panel | |
| Input Mode | Humans Finger | |
| Interface | USB | |
| Touch Number | 10 Points | |
| Cover glass pencil hardness | 7H | |
| Response Time | ≤25ms | Ms |
| Controller | ILI2511 | |

Approvals

| | |
|---------------------|---------------------|
| Declarations | UKCA / RoHS / REACH |
|---------------------|---------------------|

Similar Products

| Stock No. | Brand | Product Name | Attribute 1 | Attribute 2 | Attribute 3 |
|----------------|--------|--------------|-------------------------|-------------|-------------------|
| 0712666 | RS PRO | 8" USB-C TFT | 600 cd/m2 Brightness | No Touch | IPS Technology |
| 0712665 | RS PRO | 7" USB-C TFT | 600 cd/m2 Brightness | PCAP Touch | IPS Technology |