

Graphics Display Truly 5.7" 640 x 480 Board Information Sheet

Features

- 5.7" VGA (640 x 480) TFT display with 24-bit parallel RGB interface and 4-wire resistive touch interface
- Resistive touch controller (AR1020) interfaced to the MCU through the SPI module
- Additional direct interface to MCU for 4-wire resistive touch signals

Getting Started

To get started, a display controller board with a display connector, such as the Graphics Controller PICtail™ Plus Epson S1D13517 Board (AC164127-7), is required. For details, refer to the related documentation (DS51948).

The Graphics Display Truly 5.7" 640 x 480 Board can be used with a display controller board in conjunction with the Graphics Library for Microchip microcontrollers. The Microchip Graphics Library and other firmware examples can be downloaded from <http://www.microchip.com/graphics>. Please refer to the “Getting Started” topic in the Microchip Graphics Library Help file in the Microchip Application Library (MAL) for information on using the board.

Board Settings

- Jumpers J1, J2, J3, and J4, select between the AR1020 touch controller interface and direct MCU interface for touch signals. J1-4 on positions 2-3 select the MCU interface, and on positions 2-1, selects the AR1020 touch interface (on positions 2-3 by default).
- Jumper J5 connects the interrupt signal, PEN_INT, from the display connector to the LED anode, which is used as a visual indication utility (closed by default)

TABLE 1: SIGNAL INTERFACE FOR DISPLAY CONNECTOR

Pin #	Symbol	Level	Description	Pin #	Symbol	Level	Description
A2, B2, A12, B12, A32, B32	GND	GND	Ground	A16	R5	I	Red Data
A3,A4	3.3V	3.3V	Power Supply	B15	R6	I	Red Data
A6	LEFT/X-	I/O	Touch Panel Left	A15	R7	I	Red Data
B6	TOP/Y-	I/O	Touch Panel Top	B25	G0	I	Green Data
A7	RIGHT/X+	I/O	Touch Panel Right	A25	G1	I	Green Data
B7	BOTTOM/Y+	I/O	Touch Panel Bottom	A22	G2	I	Green Data
A8	PEN_INT	O	Led Drive/SPI Interrupt From Touch Controller	B21	G3	I	Green Data
A9	SCK	I	Spi Clock	A21	G4	I	Green Data
B9	MOSI	I	Spi Input	B17	G5	I	Green Data
A10	MISO	O	Spi Output	A17	G6	I	Green Data
B10	CS	I	Spi Chip Select	B16	G7	I	Green Data
B11	BKLT_PWM	I	Pwm Input For Backlight Driver	B26	B0	I	Blue Data
A13	SHIFT	I	Pixel Shift Signal	A26	B1	I	Blue Data
B13	DEN	I	Data Enable	B23	B2	I	Blue Data
A14	FRAME	I	Frame Pulse	A23	B3	I	Blue Data
B14	LINE	I	Line Pulse	B22	B4	I	Blue Data
B24	R0	I	Red Data	A19	B5	I	Blue Data
A24	R1	I	Red Data	B18	B6	I	Blue Data
B20	R2	I	Red Data	A18	B7	I	Blue Data
A20	R3	I	Red Data	A1, B1, B3, B4, B8, A11, A29-31, B29-B31	NC	—	Not Connected
B19	R4	I	Red Data	B27	SPENA	—	LCD SPI Chip Select
A27	RESET	I	Glass Reset	B28	SPDA	I	LCD SPI Data
A28	SPCK	I	LCD SPI Clock				

Americas

Atlanta - 678-957-9614
 Boston - 774-760-0087
 Chicago - 630-285-0071
 Cleveland - 216-447-0464
 Dallas - 972-818-7423
 Detroit - 248-538-2250
 Kokomo - 765-864-8360
 Los Angeles - 949-462-9523
 Phoenix - 480-792-7200
 Santa Clara - 408-961-6444
 Toronto - 905-673-0699

Asia/Pacific

Australia - Sydney - 61-2-9868-6733
 China - Beijing - 86-10-8528-2100
 China - Chengdu - 86-28-8665-5511
 China - Chongqing - 86-23-8980-9588
 China - Hong Kong SAR - 852-2401-1200
 China - Nanjing - 86-25-8473-2460
 China - Qingdao - 86-532-8502-7355
 China - Shanghai - 86-21-5407-5533
 China - Shenyang - 86-24-2334-2829
 China - Shenzhen - 86-755-8203-2660
 China - Wuhan - 86-27-5980-5300
 China - Xiamen - 86-592-2388138
 China - Xian - 86-29-8833-7252
 China - Zhuhai - 86-756-3210040
 India - Bangalore - 91-80-3090-4444
 India - New Delhi - 91-11-4160-8631
 India - Pune - 91-20-2566-1512
 Japan - Yokohama - 81-45-471-6166
 Korea - Daegu - 82-53-744-4301
 Korea - Seoul - 82-2-554-7200
 Malaysia - Kuala Lumpur - 60-3-6201-9857
 Malaysia - Penang - 60-4-227-8870
 Philippines - Manila - 63-2-634-9065
 Singapore - 65-6334-8870
 Taiwan - Hsin Chu - 886-3-6578-300
 Taiwan - Kaohsiung - 886-7-213-7830
 Taiwan - Taipei - 886-2-2500-6610
 Thailand - Bangkok - 66-2-694-1351

Europe

Austria - Weis - 43-7242-2244-39
 Denmark - Copenhagen - 45-4450-2828
 France - Paris - 33-1-69-53-63-20
 Germany - Munich - 49-89-627-144-0
 Italy - Milan - 39-0331-742611
 Netherlands - Drunen - 31-416-690399
 Spain - Madrid - 34-91-708-08-90
 UK - Wokingham - 44-118-921-5869

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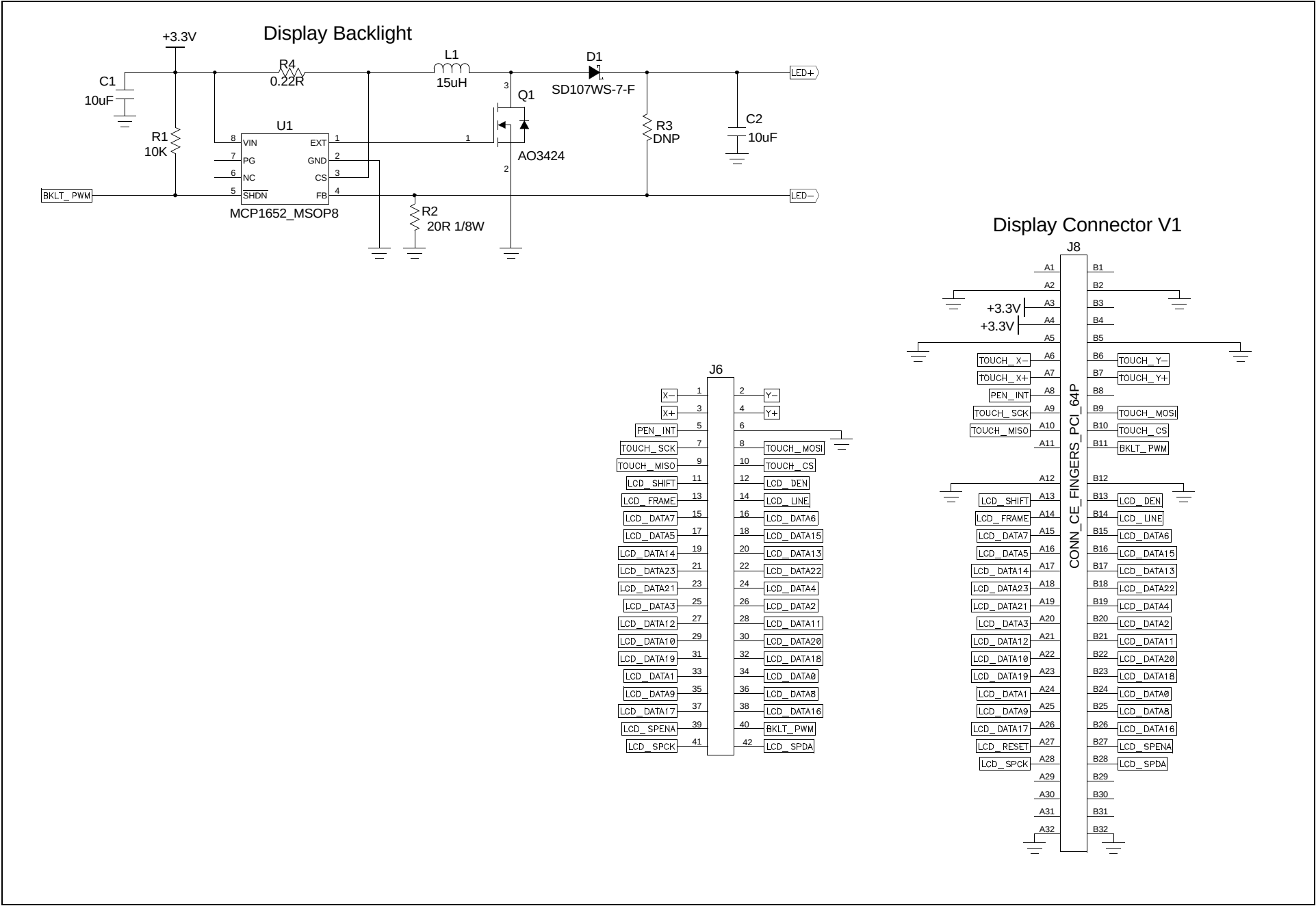
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Graphics Display Truly 5.7" 640 x 480 Board Information Sheet

Schematics (Sheet 1 of 2)



Graphics Display Truly 5.7" 640 x 480 Board Information Sheet

Schematics (Sheet 2 of 2)

