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DS00000A

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

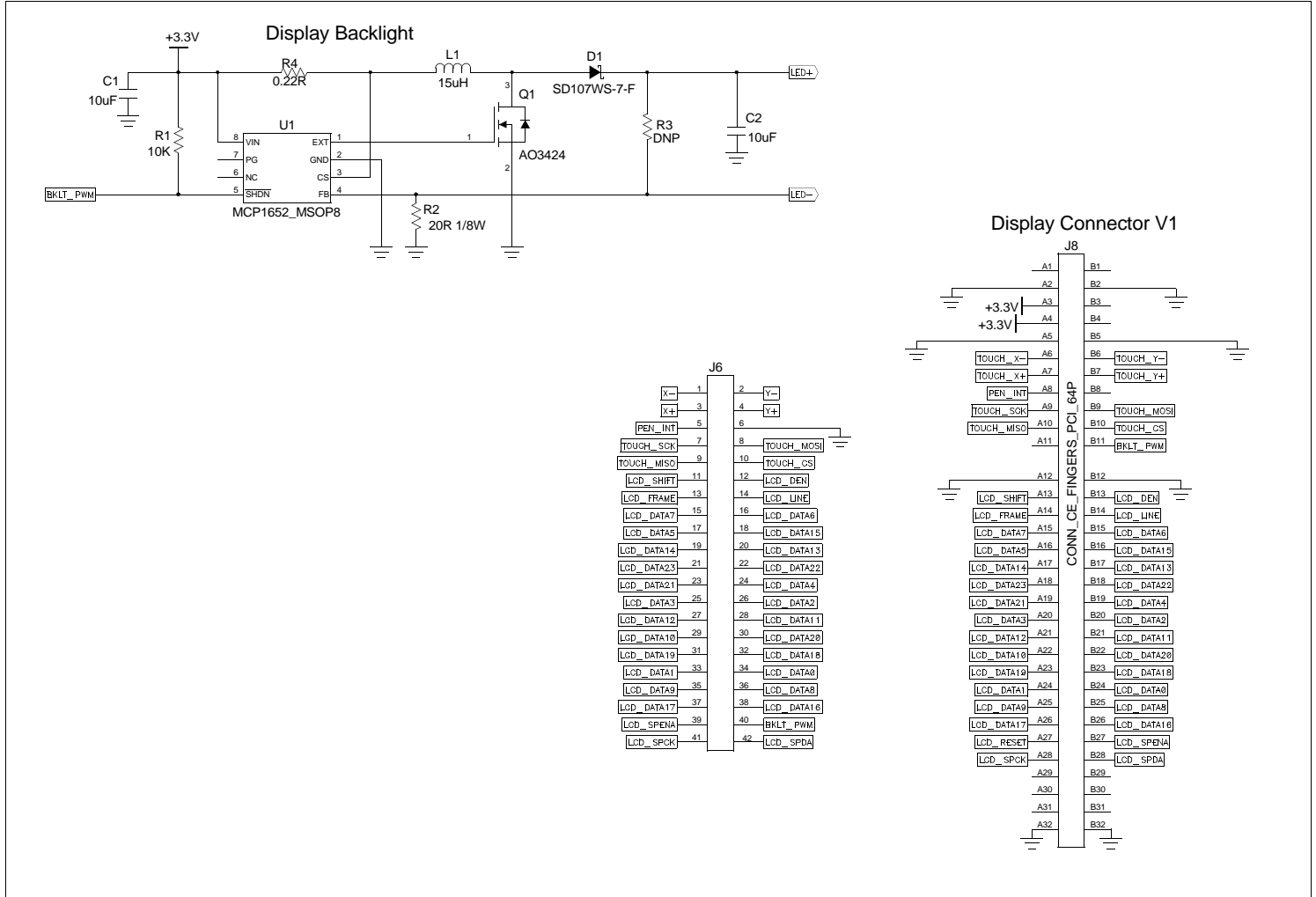
- Jumpers J1, J2, J3, and J4, select between the AR1020 touch controller interface and direct MCU interface for touch signals. J1-4 on positions 2-3 select the MCU interface, and on positions 2-1, selects the AR1020 touch interface (on positions 2-3 by default).
- Jumper J5 connects the interrupt signal, 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				

Graphics Display Truly 5.7" 640 x 480 Board Information Sheet

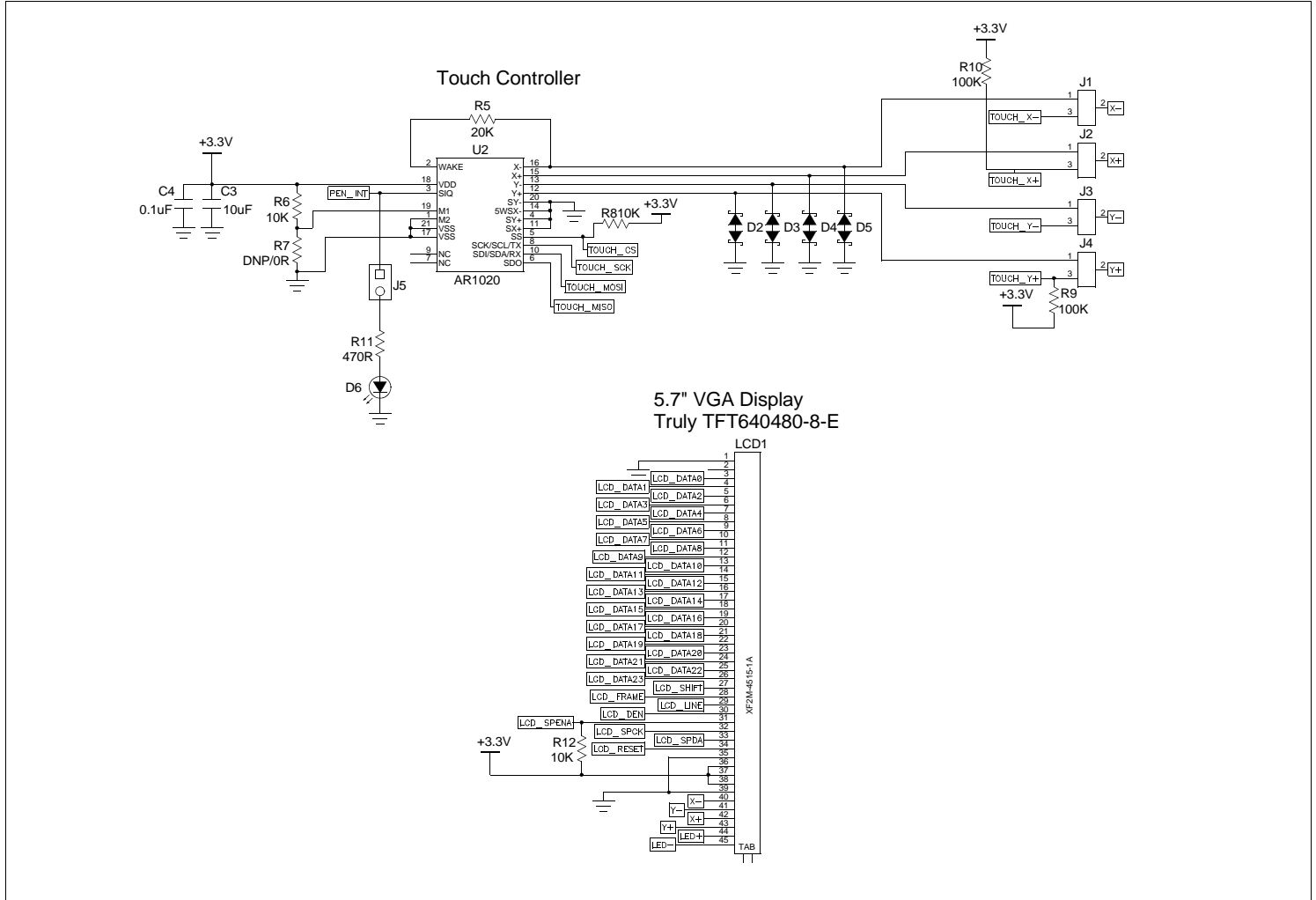
Schematics (Sheet 1 of 2)



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Graphics Display Truly 5.7" 640 x 480 Board Information Sheet

Schematics (Sheet 2 of 2)



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