

This Sheet is for interfacing the EastRising ER-TFTM070-5 7" TFT Display Board Connector JP3 to the Teensy 3.1.

Pin Name & Function	Teensy Pin TFTM070-5				Notes
	Number	Pin Number	Wire Color	Input or Output	
These pins are used to control the RA8875 Display Controller.					
RA8875_RESET	9	11	Violet	Input to TFT	This is the TFT Reset Pin
RA8875_CS	10	5	Blue	Input to TFT	This is the Chip Select pin for the TFT (Teensy 3.x can use: 2,6,9,10,15,20,21,22,23)
TFT_SCLK	14	8	Green	Input to TFT	SPI Clock, 3-wire, 4-wire Serial or I2C I/F clock.
TFT_MISO	8	6	Grey	Output from TFT	3-wire SPI Data, 4-wire SPI Data Output. If not used keep floating.
TFT_MOSI	7	7	White	Input to TFT	4-wire SPI data input, 3-wire SPI interface NC, I2C interface Bi-directional data.
BL_CONTROL		14			BackLight control signal input. When using the internal PWM signal this pin is floating.
These pins are used to control the Capacitive Touch Panel (CTP).					
CTP_WAKE	32	32		Input to TFT	This is the Touch Screen interrupt signal to wake the TFT.
CTP_INT	31	33	Red	Output from TFT	This is the Touch Screen Interrupt Request pin.
CTP_I2C-SDA1	30	34	Yellow	I/O	Serial data input/output.
CTP_I2C-SCL1	29	35	Orange	Input to TFT	Serial clock input.
CTP_/RST		36		Input to TFT	External low active signal resets the F5206 chip, if not used leave floating.
TFT_Ground		1	Black	Pwr Sup In Neg.	Ground Pin
TFT_Ground		2	Black	Pwr Sup In Neg.	Ground Pin
TFT_Power (Vcc +5V)		3	Red	Pwr Sup In Pos.	Power Input Pin +5V
TFT_Power (Vcc +5V)		4	Red	Pwr Sup In Pos.	Power Input Pin +5V
TFT_Ground		31			Ground Pin
TFT_Power (Vcc +5V)		37			Power Input Pin +5V
TFT_Power (Vcc +5V)		38			Power Input Pin +5V
TFT_Ground	GND1	39	Blue		Ground Pin
TFT_Ground	GND2	40	Black		Ground Pin