

Quick Start Guide

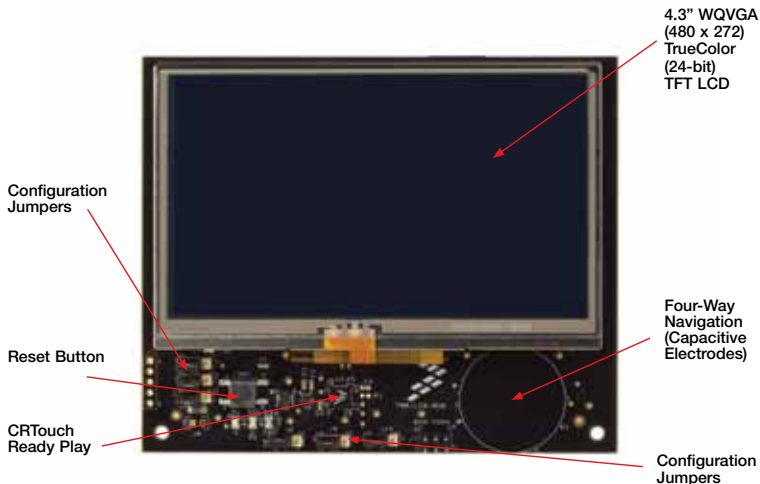
TWR-LCD-RGB

Graphical LCD Module
with RGB Interface



TOWER SYSTEM

Get to Know the TWR-LCD-RGB



TWR-LCD-RGB Freescale Tower System

The TWR-LCD-RGB module is part of the Freescale Tower System, a modular development platform that enables rapid prototyping and tool re-use through reconfigurable hardware. Take your design to the next level and begin prototyping with your Tower System today.

TWR-LCD-RGB Features

- 4.3" TFT LCD panel
 - WQVGA resolution (480 x 272)
 - 24-bit color depth (TrueColor)
 - 4-wire resistive touch overlay
- CRTouch Ready Play
 - X/Y resistive touch detection
 - Capacitive touch detection
 - I²C interface to Tower System MCU
- PEG and eGUI support drivers
- Compatible with the RGB interface defined on the secondary Tower elevator
- Pre-assembled with the included secondary TWR-ELEV

Step-by-Step Installation Instructions

1 Check TWR-LCD-RGB board

The TWR-LCD-RGB comes pre-attached to a secondary Tower System elevator module. To avoid damaging the LCD panel, it is recommended that the TWR-LCD-RGB module not be detached from the secondary Elevator module.

2 Assemble Tower System

The TWR-LCD-RGB requires the use of either a controller module with an integrated LCD controller or an additional peripheral module that implements an LCD controller. Assemble your Tower System, following the instructions provided within the Quick Start Guide for the TWR-ELEV modules, making sure to properly attach the controller or peripheral module(s).

3 Get Software

Visit swellsoftware.com or freescale.com/eGUI to download the respective graphical development applications.

4 Learn More

Visit freescale.com/Tower for additional information and example application projects for select Tower System controller modules.

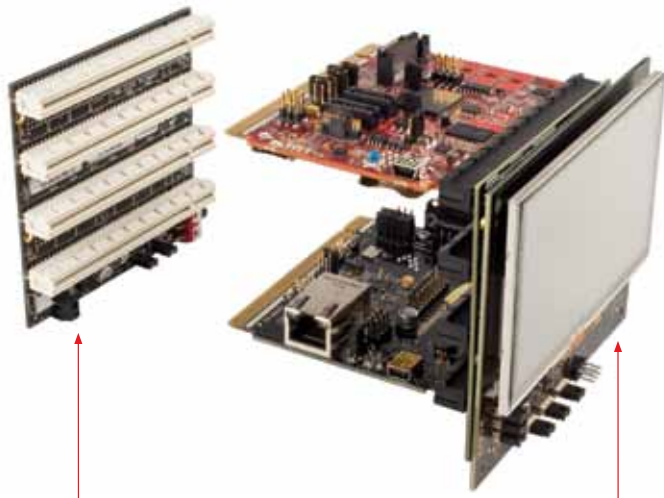
TWR-LCD-RGB Jumper Options

The following is a list of all jumper options. The default installed jumper settings are shown in white text within the black boxes.

Jumper	Option	Setting	Description
J2	Y+ Selection	1-2	Use the on-board CRTouch
		2-3	Routes the Y+ signal to the AN8 (ELEV C30)
J3	X- Selection	1-2	Use the on-board CRTouch
		2-3	Routes the X- signal to the AN9 (ELEV C29)
J5	Y- Selection	1-2	Use the on-board CRTouch
		2-3	Routes the Y- signal to the AN10 (ELEV C28)
J8	X+ Selection	1-2	Use the on-board CRTouch
		2-3	Routes the X+ signal to the AN11 (ELEV C27)
J9	LED DIM Control	1-2	Uses PWM15 (ELEV D37) to control the LED brightness
		2-3	Uses GPIO22 (ELEV D43) to control the LED on/off state
J10	IRQ Selection	1-2	CRTouch IRQ is connected to IRQ_I (ELEV D62)
		2-3	CRTouch IRQ is connected to IRQ_K (ELEV D64)

TWR-LCD-RGB Graphical LCD Module

As part of an assembled Tower System.



Please attach a primary TWR-ELEV module along with MCU and peripheral modules for complete Tower System assembly.

TWR-LCD-RGB comes pre-attached to the secondary TWR-ELEV module.



Visit **freescale.com/Tower** for information on the TWR-LCD-RGB module, including:

- TWR-LCD-RGB user's guide
- TWR-LCD-RGB schematics
- Tower System fact sheet
- Pre-compiled example application
- Links to PEG and eGUI graphical development tools

Support

Visit **freescale.com/support** for a list of phone numbers within your region.

Warranty

Visit **freescale.com/warranty** for complete warranty information.

For more information, visit **freescale.com/Tower**

Join the online Tower community at **towergeeks.org**

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