

Quick Start Guide

TWR-TWRPI-BD

Tower Plug-In Carrier Module





TOWER SYSTEM



GEL 10 KNOW the TWR-TWRPI-BD





TWR-TWRPI-BD Freescale Tower System

The TWR-TWRPI-BD 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.



Step-by-Step Installation Instructions

In this quick start guide you will learn to set up the TWR-TWRPI-BD module and run the included demostration software. For more detailed information, review the user manual at freescale.com/Tower

Identify

Identify the desired TWRPIs to be utilized with the TWR-TWRPI-BD and the respective interfaces required for each TWRPL

Configure **Jumpers**

Configure the TWR-TWRPI-BD jumpers to correctly interface with the respective TWRPI. Refer to the jumper table in this document for reference and the user manual for additional details. Be aware that not all controller modules will provide access to all signals available on the TWR-TWRPI-BD. Refer to the respective controller module documentation for details of which signals are available.

Ensure Compatibility

Each interface featured on the TWR-TWRPI-BD is capable of being isolated from the Tower System. To maintain the best compatibility with additional Tower peripheral module. it is recommended that any unused interfaces be isolated.



TWR-TWRPI-BD 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.

TWRPI Socket A Configuration

Jumper	Option	Setting	Description
J2	GPIO4/UART CTS Isolation	1-2	Connects J9_Pin19 to primary elevator signal GPIO9/UART1_CTS (A9)
J4	GPIO5/UART RTS Isolation	1-2	Connects J9_Pin20 to primary elevator signal GPIO1/UART1_RTS (B21)
J6	TWRPI-ID1 Isolation	1-2	Connects J10_Pin18 to primary elevator signal AN1 (A29)
J12	TWRPI-ID0 Isolation	1-2	Connects J10_Pin17 to primary elevator signal AN0 (A30)
J14	UART RX/ GPIO2 Isolation	1-2	Connects J9_Pin17 to primary elevator signal UART1_RX (A43)
J16	UART TX/ GPIO3 Isolation	1-2	Connects J9_Pin18 to primary elevator signal UART1_TX (A44)



I WINE SOUKET B Configuration

Jumper	Option	Setting	Description			
J1	UART TX/GPIO3 Isolation	1-2	Connects J7_Pin18 to primary elevator signal UART0_TX (A42)			
J3	UART RX/GPIO2 Isolation	1-2	Connects J7_Pin17 to primary elevator signal UART0_RX (A41)			
J5	TMR/GPIO5 Isolation	1-2	Connects J7_Pin20 to primary elevator signal TMR0 (A34)			
J11	TMR/GPIO4 Isolation	1-2	Connects J7_Pin19 to primary elevator signal TMR1 (A33)			
J13	TWRPI-ID0 Isolation	1-2	Connects J8_Pin17 to primary elevator signal AN2 (A28)			
J15	TWRPI-ID1 Isolation	1-2	Connects J8_Pin18 to primary elevator signal AN3 (A27)			
J18	SPI CS Selection	1-2	Connects J7_Pin11 to primary elevator signal SPI1_CS0 (B9)			
		2-3	Connects J7_Pin11 to primary elevator signal SPI1_CS1 (B8)			
J20	GPIO0/IRQ Selection	1-2	Connects J7_Pin15 to primary elevator signal GPIO8 (A10)			
		3-4	Connects J7_Pin15 to primary elevator signal IRQ_C (B60)			
J22	GPIO1/IRQ Selection	1-2	Connects J7_Pin16 to primary elevator signal GPIO7 (A11)			
		3-4	Connects J7_Pin16 to primary elevator signal IRQ_G (B56)			

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Jumper	Option	Setting	Description
J26	I ² C SCL Selection	1-2	Connect primary elevator signal I2C0_SCL (A7) to all TWRPI sockets
		3-4	Connect primary elevator signal I2C1_SCL (B50) to all TWRPI sockets
J27	PC SDA Selection	1-2	Connect primary elevator signal I2C0_SDA (A8) to all TWRPI sockets
		2-3	Connect primary elevator signal I2C1_SDA (B51) to all TWRPI sockets

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Visit **freescale.com/Tower** for more information on the TWR-TWRPI-BD, including:

- Schematics
- User manual

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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