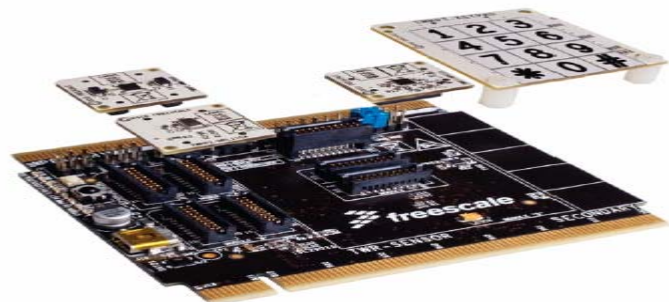




Freescale - TWR-SENSOR-PAK - Tower System Module

Product Overview:

The TWR-SENSOR-PAK is a module in the Tower System that features swappable sensor modules, or plug-ins. This swappable plug-ins allow you to rapidly evaluate and compare an expanding portfolio of sensors. Using real-time sensor data and interaction with your environment, it's easy to sense your world with the TWR-SENSOR-PAK. With a dedicated S08QE96 microcontroller on board, the TWR-SENSOR-PAK module can be used stand-alone or as part of a complete Tower System.



Kit Contents:

The TWR-SENSOR-PAK module comes packaged as two boxes with the following:

- Box 1
 - Sensor Module (TWR-SENSOR)
 - Touch Sensing Software plug-in module (TWRPI-TSS)
 - 12-electrode touchpad plug-in module (TWRPI-KEYPAD)
 - Quick Start Guide
- Box 2
 - Accelerometer plug-in module (TWRPI-MMA7660)
 - Barometer plug-in module (TWRPI-MPL115A)
 - Proximity touch controller plug-in module (TWRPI-MPR121)
 - 1 USB Cable

Key Features:

The TWR-SENSOR-PAK has the following product features:

- Swappable Freescale Sensor Modules
 - Touch Sense Controller (MPR121)
 - Accelerometer (MMA7660, MMA6900)

- Pressure Sensor (MPL115A)
- Touch Sensing Software Suite (TSS)
- Keypad Touch Pad Module

- On-board Slider / Touch Pad
 - With dedicated Touch Sense Controller (MPR032)
- On-board MCU (MC9S08QE96)

- On-Board 3rd Party Sensors
 - Sensirion SHT21 Temperature / Humidity
 - Ambient Light / Proximity
 - IR Receiver
- OSBDM / Serial-to-USB

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
TWR-SENSOR-PAK	Freescale	NA	69R0538

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
MPL115A2	Freescale	Digital Barometer	NA	69R5779
MPR121QR2	Freescale	Capacitive Touch sensor	NA	24R9786
MC9S08JM60	Freescale	8-bit Microcontroller	1562863	54M7189
MC9S08QE96	Freescale	8-bit Microcontroller	NA	12N7252

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
TWR-MEM	Freescale	Tower System Memory Module	HC(S)08/ ColdFire V1)	NA	68R1768
TWR-MCF51CN-KIT	Freescale	Development Kit for MCF51CN128	MCF51CN128	NA	11R0869

Document List:

Datasheets:

Part Number	Description	Size
MC9S08JM60	8-bit Microcontroller Datasheet	4.7MB
MPL115A2	Digital Barometer	211KB
MPR121QR2	Capacitive Touch sensor	565KB
MMA7660FCR1	Accelerometer Sensor	797KB

Application Notes:

File Name	Size
MPR121 Serial Communication	201KB
Humidity at a Glance Most Relevant Equations	124KB

Hardware & Software:

File Name	Size
CW-MICROCONTROLLERS: CodeWarrior for Microcontrollers	447MB
TOWER_CONFIG_TOOL	139KB