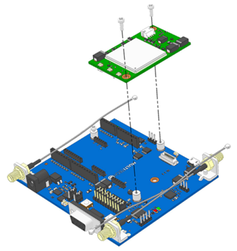
Mounting a SocketModem MTQ

To install a SocketModem MTQ:

1. Remove the screws from the developer board.
2. Align the SocketModem MTQ on the developer board as shown.
3. Secure the SocketModem MTQ with the screws.

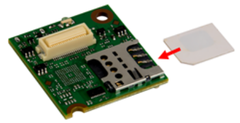


Installing a SIM Card on a SocketModem MTQN

Note: When using the SocketModem MTQN with a developer board, install the SIM card before mounting the SocketModem MTQN on the developer board.

To install the SIM card:

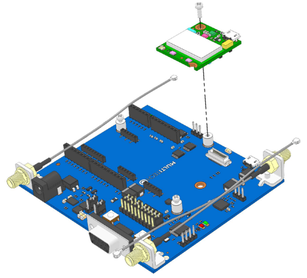
- Refer to the image below on how to install the SIM card.
- Slide the SIM card completely into the SIM holder.



Installing a SocketModem MTQN

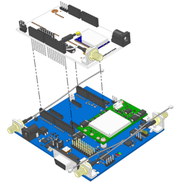
To install a SocketModem MTQN:

1. Remove the screw from the developer board.
2. Align the SocketModem MTQN on developer board as shown.



Using an Arduino Shield

SocketModem MTQ



SocketModem MTQ Arduino Pins

Signals (micro pin)		Arduino Shield			Signals (micro pin)
			D15		D15/SCL/SS1 (PB8)
			D14		D14/SDA/SRDY (PB9)
			AVDD		3.3V
			GND		Ground
		NC	D13	X5	D13/SCK (PA5)
3.3V		VREF	D12		D12/MISO (PA6)
nReset, from pushbutton		nRST	D11		D11/MOSI (PB5)
3.3V		3.3V	D10		D10/SS2 (PC8)
5.0V	X8	5.0V	D9		D9 (PB13)
Ground		GND	D8		D8/RI (PB1)
Ground		GND			
5-9V input from J3		VIN	D7		D7/DTR (PA8)
			D6		D6/CTS (PA1)
A0 (PC2)		A0	D5		D5/DSR (PA9)
A1 (PC0)		A1	D4	X7	D4/DCD (PA7)
A2 (PC4)	X6	A2	D3		D3/RTS (PA0)
A3 (PB0)		A3	D2		D2 (PB15)
A4 (PC1)		A4	D1		D1/RXD (PA2)
DIO (PC9)		A5	D0		D0/TXD (PA3)

Safety and Regulatory Content

For safety and regulatory content, refer to the Device Guide for your model.

Universal Developer Kit MTUDK2-ST-CELL.R1 Quick Start Guide

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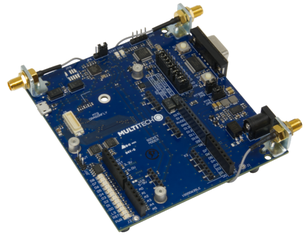
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Universal Developer Kit

MTUDK2-ST-CELL.R1 Quick Start Guide

Overview

Thank you for purchasing the Developer Kit for SocketModem Cell, SocketModem MTQ, and SocketModem MTQN cellular devices. This kit provides a convenient platform that enables you to streamline development efforts.

Related Documentation

This User Guide provides information about the Developer Kit. You will also need:

- **Device Guide** for your SocketModem Cell or SocketModem MTQ model for specifications, pin information, mechanical drawings, labeling, regulatory information, and other model specific details.
- **AT Command Reference Guide** for the radio on your device.
- **USB Driver Installation Guide** for USB models, for driver installation steps.
- **Developer Guide** for the MTUDK2-ST-CELL.R1 Universal Developer Kit.

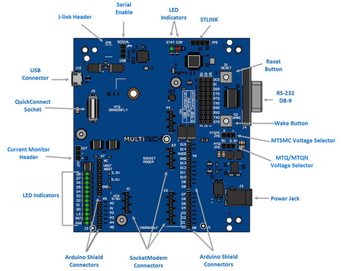
These documents are available through your model's pages at https://www.multitech.com/resources/manuals.

Package Contents

Your Developer Kit (MTUDK2-ST-CELL.R1) includes the following:

Developer Board	1 - MTUDK 2.0 Cell Developer Board
Power Supply	1 - 100-240V 9V-1.7A power supply with removable blades, 1 - US blade/plug, 1 - EU blade/plug, 1 - GB blade/plug, 1-AU/NZ blade/plug
Cables	1 - Micro USB Cable, 3 - SMA-UFL Antenna Cables (attached to developer board)
Antennas	1 - 3.3V magnetic GPS antenna , 2 - LTE SMA antenna
Customer Notices	Quick Start Guide
Additional	One promotional screwdriver

Developer Board



Board Components

Label	Description
J1	Scope probe ground connection
J2	Scope probe ground connection
J3	Power Jack
J4	RS-232 Connector
J5	QuickConnect Socket (for MTQ/MTQN devices).

Label	Description
J10	USB connector for mbed, serial, and SocketModem Cell. For the MTQ/MTQN, use the USB connector on the MTQ/MTQN. For information on connecting to and using mbed, refer to the device guide for your MTQ/MTQN model. (Not available for SocketModem Cells.)
JP1	3-row connector: USB Connector, MTQ/MTSMC, D-SUB Connector. Refer to MTUDK2-ST-CELL.R1 Developer Guide for additional information.
JP4	For the MTSMC, used to disable the USB interface. Default jumper position is 1-2 for USB.
JP5	Selects between the on-board 3.3V or 5V regulator for powering an MTQ or MTQN. Jumper Pins 1-2: Target voltage 3.3V. Jumper pins 2-3: Target voltage 5V.
JP6	Selects between the on-board 3.3V or 5V regulator for powering an MTSMC. Jumper Pins 1-2: Target voltage 3.3V. Jumper pins 2-3: Target voltage 5V.
JP7	Used with the Current Monitor (U4) to for monitoring the current for the device.
JP8	J-link Header
JP9	4-pin Header STLINK
S1	Reset Button. Use to reset the processor of the device attached to the board.
S2	Wake Button. Use to wake the MTSMC/MTQ/MTQN.
X1	SocketModem Cell, USB Connector.
X2	SocketModem Cell Serial Connector.
X3	SocketModem Cell, GPIO (not connected).
X4	SocketModem Cell Power Connector.
X5	Arduino Shield Connector.

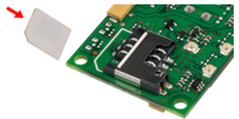
Label	Description
X6	Arduino Shield Connector.
X7	Arduino Shield Connector.
X8	Arduino Shield Connector.

Installing a SIM Card on a SocketModem Cell

When using the SocketModem Cell with a developer board, mount the SocketModem Cell on the developer board before installing the SIM Card.

To install the SIM Card:

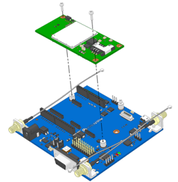
- With the contact side facing down, align the notched edge as outlined on the SocketModem Cell and slide the SIM Card completely into the SIM holder.



Mounting a SocketModem Cell

To mount a SocketModem Cell on the developer board:

1. Remove the screws from the developer board.
2. Align the SocketModem Cell on the developer board as shown.
3. Secure the SocketModem Cell with the screws.



Installing a SIM Card on a SocketModem MTQ

When using the SocketModem MTQ with a developer board, install the SIM card before mounting the SocketModem MTQ on the developer board.

To install the SIM card:

- With the contact side facing down, align the notched edge as shown on the SocketModem's SIM holder and slide the SIM card completely into the SIM holder.

