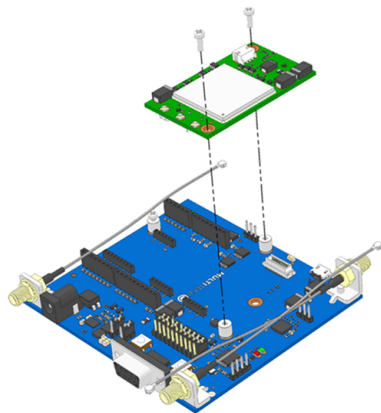


Mounting a Dragonfly

To install a Dragonfly:

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

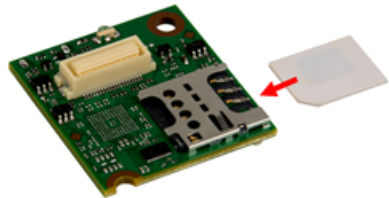


Installing a SIM Card on a Dragonfly Nano

Note: When using the Dragonfly™ Nano with a developer board, install the SIM card before mounting the Dragonfly™ Nano on the developer board.

To install the SIM card:

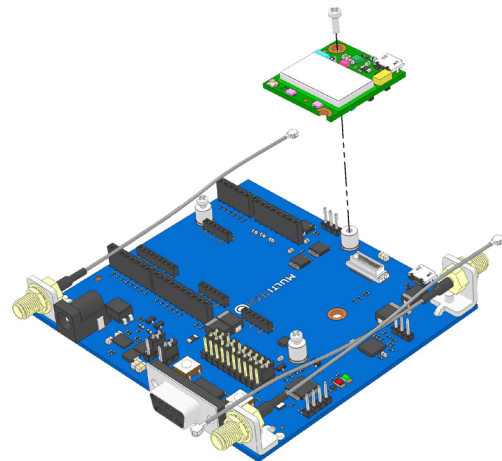
- Refer to the image below on how to install the SIM card.
- Slide the SIM card completely into the SIM holder.



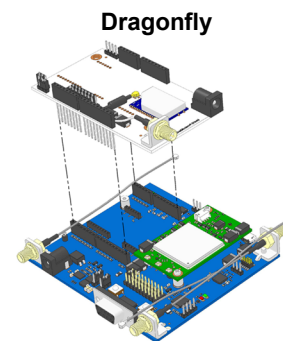
Installing a Dragonfly Nano

To install a Dragonfly Nano:

1. Remove the screw from the developer board.
2. Align the Dragonfly Nano on developer board as shown.



Using an Arduino Shield



Dragonfly 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
	D13	D13/SCK (PA5)
	D12	D12/MISO (PA6)
	D11	D11/MOSI (PB5)
	D10	D10/SS2 (PC8)
	D9	D9 (PB13)
	D8	D8/RI (PB1)
	VIN	
	D7	D7/DTR (PA8)
	D6	D6/CTS (PA1)
	D5	D5/DSR (PA9)
A0 (PC2)	A0	D4/DCD (PA7)
A1 (PC0)	A1	D3/RTS (PA0)
A2 (PC4)	A2	D2 (PB15)
A3 (PB0)	A3	D1/RXD (PA2)
A4 (PC1)	A4	D0/TXD (PA3)
DIO (PC9)	A5	

Safety and Regulatory Content

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

Universal Developer Kit 2 MTUDK2-ST-CELL.R1 Quick Start

Part Number: 82101353L

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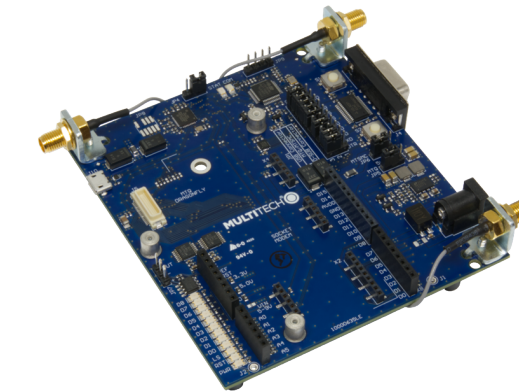
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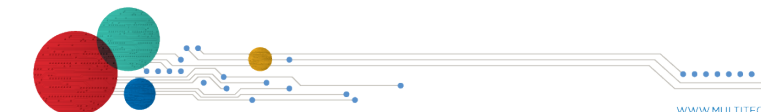


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Universal Developer Kit 2 MTUDK2-ST-Cell.R1 Quick Start



Overview

Thank you for purchasing the Developer Kit for SocketModem, Dragonfly, and Dragonfly Nano 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 or Dragonfly 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.

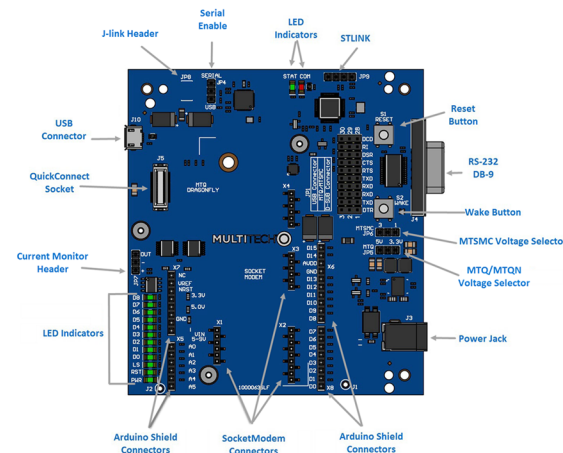
These documents are available through your model's pages at <https://www.multitech.com/resources/manuals>.

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 - NAM blade/plug, 1 - EURO blade/plug, 1 - UK blade/plug, 1-AU/NZ blade/plug
Cables	1 -1 meter USB 2.0 1 mini 24AWG P-G, 3 - Coax SMA-U.FL 4.5: CROHS
Antennas	1 - 3.3V magnetic GPS antenna , 2 - LTE SMA antenna
Customer Notices	Quick Start
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).
J10	USB connector for mbed, serial, and SocketModem. 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 SocketModems.)

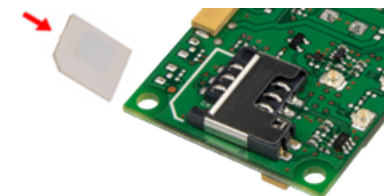
Label	Description
JP1	3-row connector: USB Connector, MTQ/MTSMC, D-SUB Connector. Refer to JP1 USB Connector for additional information.
JP4	For the MTSMC, used to disable the USB interface. Default jumper position is 1-2 for USB.
JP5	Selects between the on-board 3.3V or 5V regulator for powering an 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, USB Connector.
X2	SocketModem Serial Connector.
X3	SocketModem, GPIO (not connected).
X4	SocketModem Power Connector.
X5	Arduino Shield Connector.
X6	Arduino Shield Connector.
X7	Arduino Shield Connector.
X8	Arduino Shield Connector.

Installing a SIM Card on a Socketmodem

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

To install the SIM Card:

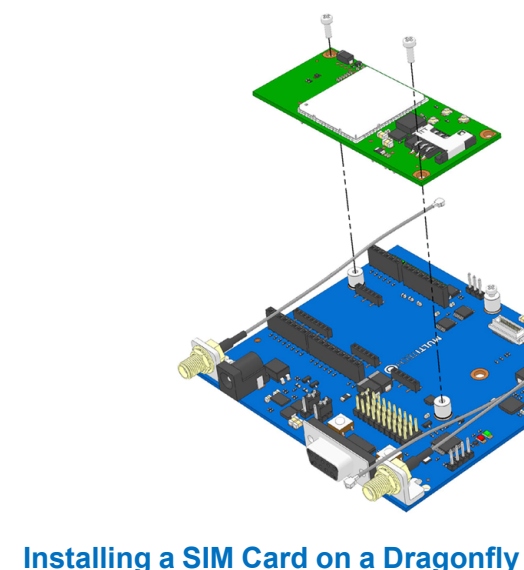
- With the contact side facing down, align the notched edge as outlined on the SocketModem and slide the SIM Card completely into the SIM holder.



Mounting a SocketModem

To mount a SocketModem on the developer board:

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



Installing a SIM Card on a Dragonfly

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

To install the SIM card:

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

