

Evaluation Kit Quick-Start Guide

EVAL Kit Physical Contents

Item #	Description	Quantity		
		Included	Downloadable	User-Supplied
1	KTD2052 EVB Rev1.0 fully assembled printed circuit board	1		
2	StemmaQT/Qwiic I ² C wire harness	1		
3	Adafruit QT Py RP2040 μ C fully assembled printed circuit board	1		
4	USB type-A to type-C cable	1		
5	Demo software (pre-loaded on QT Py)	1	by request	
6	EVAL Kit Manual (pre-loaded on QT Py)	1	1	
7	USB 5V power source			1

Quick-Start Guide

- Using the StemmaQT/Qwiic I²C wiring harness, connect the EVAL Kit PCB to the QT Py PCB. To avoid damage within the connectors, do not insert the StemmaQT/Qwiic connectors upside down.
- Connect the USB cable to the QT Py RP2040 PCB.
- Connect the other end of the USB cable to a USB 5V power source (user-supplied). You may use an AC wall adapter, battery power bank, or an available USB port from a computer.
- When power is applied, the demo software executes. Observe the first three patterns to ensure full functionality:
 - All 4 RGB modules turn very dim white for 3 seconds.
 - Red flashes 3 times quickly on RGB1, then white chases 1 time quickly across RGB1/2/3/4.
 - Blue breathes 4 times slowly on RGB1/2/3/4.
- After the test patterns, the demo continues with many other patterns.
- When complete, the entire demo repeats and loops endlessly.
- When desired, remove power by pulling the AC wall adapter from the AC outlet, or by disconnecting the USB cable from the USB power source.
- Optionally, to read or modify the demo software, connect the USB cable to a computer.
 - The QT Py RP2040 connects as an 8MB USB flash drive. The software and collateral documents are stored within.
 - Open the CircuitPython text file *code.py* with a software editor. Adafruit recommends the freeware *Mu* editor, which is optimized for CircuitPython.
 - When editing *code.py*, save changes to the QT Py RP2040. After saving, the code will recompile and execute automatically.
 - For backup, the *code.py* file is already replicated as *KTD2052_demo_code.txt* on the QT Py RP2040.
- For additional resources:
 - KTD2052 Product <https://www.kinet-ic.com/ktd2052/>
 - KTD2052 EVAL Kit <https://www.kinet-ic.com/ktd2052aevaa-mmev01/>
 - Adafruit QT Py RP2040 <https://learn.adafruit.com/adafruit-qt-py-2040/overview>
 - Adafruit CircuitPython <https://learn.adafruit.com/welcome-to-circuitpython/overview>
 - Mu Editor Installation <https://codewith.mu>