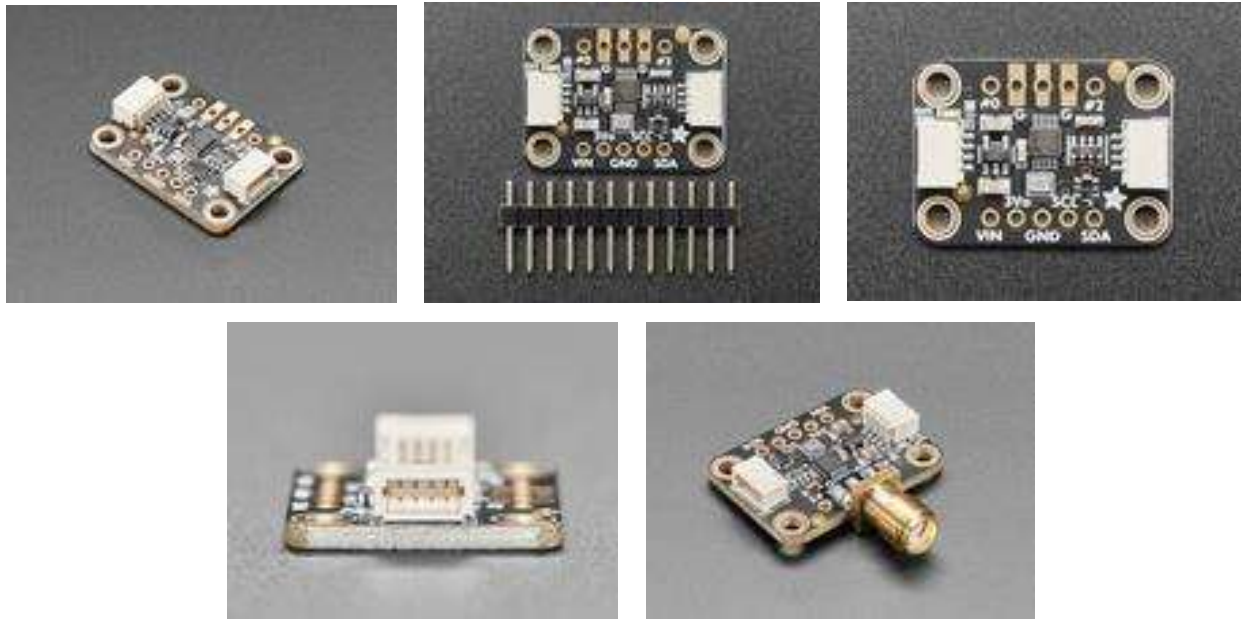




# Si5351A Clock Generator with STEMMA QT – 8KHz to 160MHz

Product ID: 5640



## Description

Never hunt around for another crystal again, with the Si5351A clock generator breakout from Adafruit! This chip has a precision 25MHz crystal reference and internal PLL and dividers so it can generate just about any frequency, from <8KHz up to 150+ MHz.

The Si5351A clock generator is an I2C controller clock generator. It uses the onboard precision clock to drive multiple PLL's and clock dividers using I2C instructions. By setting up the PLL and dividers you can create precise and arbitrary frequencies. There are three independent outputs, and each one can have a different frequency. Outputs are 3Vpp, either through a breadboard-friendly header or, for RF work, an optional edge-launch SMA connector for output #1. (If you need SMA-connector outputs for all three ports, check out the non-QT breakout)

To get you going fast, we spun up a custom-made PCB in the STEMMA QT form factor, making it easy to interface with. The STEMMA QT connectors on either side are compatible with the SparkFun Qwiic I2C connectors. This allows you to make solderless connections between your development board and the Si5351 or to chain it with a wide range of other sensors and accessories using a compatible cable. Onboard 3.3V LDO and level shifters means its ready for use with 3V or 5V power and logic!

Best of all, we even have a great tutorial and library to get you started! Our code is designed for use with the Arduino-compatible microcontrollers and CircuitPython/Python using I2C support.

## Technical Details

Si5351 specifications:

- Generates up to 3 non-integer-related frequencies from 8 kHz to 160 MHz
- I2C user definable configuration v Exact frequency synthesis at each output (0 ppm error)
- Highly linear VCXO
- Low output period jitter: 100 ps pp
- Configurable spread spectrum selectable at each output
- Operates from a low-cost, fixed frequency crystal: 25 MHz on board
- Supports static phase offset
- Programmable rise/fall time control
- Glitchless frequency changes
- Excellent PSRR eliminates external power supply filtering
- Very low power consumption
- Adjustable output-output dela
- PCIe Gen 1 compliant
- Supports HCSL compatible swing

Product Dimensions: 25.3mm x 17.7mm x 4.7mm / 1.0" x 0.7" x 0.2"

Product Weight: 1.7g / 0.1oz

