

Clock Gen Click



PID: MIKROE-4113

Clock Gen Click offers an ideal replacement for crystals, crystal oscillators, VCXOs, phase-locked loops (PLLs), and fanout buffers in cost-sensitive applications. This click features the [Si5351A](#) from [Silicon Labs](#), an I2C configurable clock generator based on a PLL + high resolution MultiSynth fractional divider architecture which can generate any frequency up to 200 MHz on each of its outputs with 0 ppm error. The Si5351A is capable of generating synchronous or free-running non-integer related clock frequencies at each of its outputs (CLK0, CLK1, and CLK2), enabling one device to synthesize clocks for multiple clock domains in a design. It eliminates the need for higher cost, custom pullable crystals while providing reliable operation over a wide tuning range. The Si5351C offers the same flexibility but synchronizes to an external reference clock.

Clock Gen Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board™ comes as a fully tested product, ready to be used on a system equipped with the mikroBUS™ socket.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
ISO 14001: 2015 certification of environmental management system.
OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Specifications

Type	Clock generator
Applications	Audio/video equipment, gaming, printers, scanners, projectors, handheld instrumentation, laser range finder, residential gateways, network/communication, servers, storage, XO replacement.
On-board modules	Clock Gen Click uses the SI5351A-B-GT IC, a configurable clock generator, from Silicon Labs.
Key Features	Configurable clock generator with three outputs, freq generator from 2.5 kHz to 200 MHz, very low power consumption
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[Clock Gen click example on Libstock](#)

[SI5351 datasheet](#)

[Clock Gen click 2D and 3D files](#)

[Clock Gen click schematic](#)

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