

## Plug&Trust Click



PID: MIKROE-4656

**Plug&Trust Click** is a compact add-on board that contains a ready-to-use IoT secure element solution. This board features the SE050C from NXP Semiconductors, which provides a root of trust at the IC level, and it gives an IoT system state-of-the-art, edge-to-cloud security capability. The SE050C allows for securely storing and provisioning credentials and performing cryptographic operations for security-critical communication and control functions. It has an independent Common Criteria EAL 6+ security certification up to OS level and supports both RSA & ECC asymmetric cryptographic algorithms with high key length and future proof ECC curves, protecting the SE050C even against sophisticated non-invasive and invasive attack scenarios. This Click board™ is suitable in IoT security use cases such as secure connection to public/private clouds, device-to-device authentication, sensor data protection, and more.

Plug&Trust 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	Encryption, IoT security
Applications	Can be used in IoT security use cases such as secure connection to public/private clouds, device-to-device authentication, sensor data protection, and more. ISO14443 CL, I2C Target and Controller mode
On-board modules	SE050C - ready-to-use IoT secure element solution that provides a root of trust at the IC level, and it gives an IoT system state-of-the-art, edge-to-cloud security capability from NXP Semiconductors
Key Features	Ready-to-use IoT secure element solution, Common Criteria EAL 6+ security certification, supports both RSA & ECC asymmetric cryptographic algorithms with high key length and future proof ECC curves, protect against attack scenarios, comes with JavaCard operating system, and more.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[Plug&Trust click 2D and 3D files](#)

[SE050C datasheet](#)

[Plug&Trust click schematic](#)

[Plug&Trust click example on Libstock](#)

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