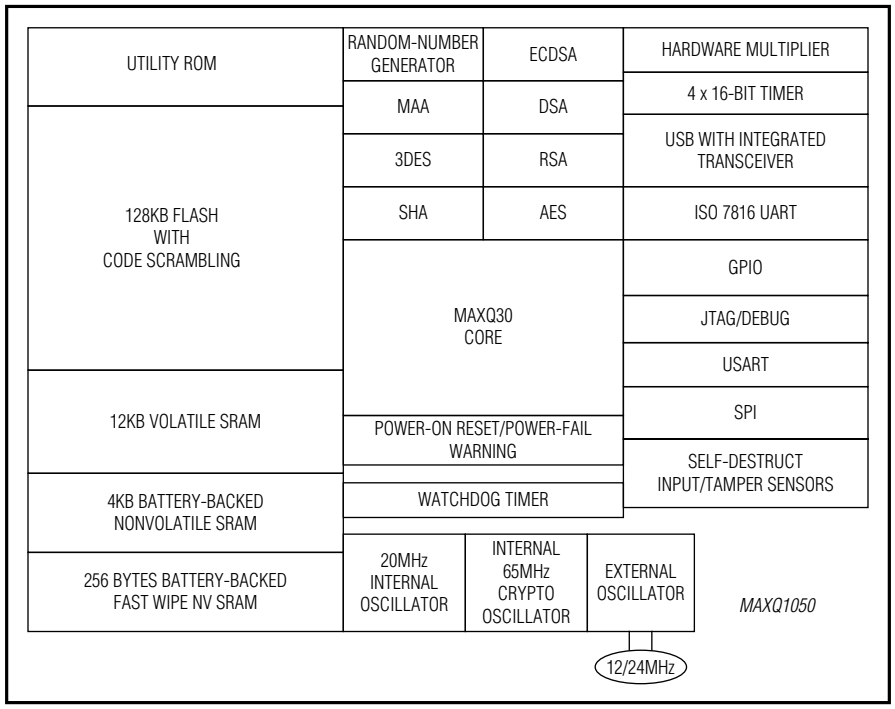
MAXQ1050

DeepCover Secure Microcontroller with USB and Hardware Cryptography

Block Diagram



MAXQ1050

DeepCover Secure Microcontroller with USB and Hardware Cryptography

Additional Documentation

Designers must have the following documents to fully use all the features of this device. This data sheet contains pin descriptions, feature overviews, and electrical specifications. Errata sheets contain deviations from published specifications. User guides offer detailed descriptions of device features and peripherals from a programming perspective. The following documents can be obtained by contacting a technical support specialist.

- This MAXQ1050 data sheet, which contains electrical/timing specifications, package information, and pin descriptions.
- The MAXQ1050 revision-specific errata sheet.
- The *MAXQ1050 User's Guide*, which contains detailed information and programming guidelines for core features and peripherals.

Development and Technical Support

Maxim and third-party suppliers provide a variety of highly versatile, affordably priced development tools for this microcontroller, including the following:

- Compilers
- In-circuit emulators
- Integrated Development Environments (IDEs)
- JTAG-to-serial converters for programming and debugging

A partial list of development tool vendors can be found at **www.maximintegrated.com/MAXQ_tools**.

For technical support, go to **https://support.maximintegrated.com/micro**.

Ordering Information

PART	TEMP RANGE	FLASH PROGRAM MEMORY (KB)	DATA MEMORY	PIN-PACKAGE
MAXQ1050-BNS+	-40°C to +85°C	128	12KB SRAM 4KB NV SRAM 256B fast wipe NV SRAM	40 TQFN-EP*
MAXQ1050-DNS+	-40°C to +85°C	128	12KB SRAM 4KB NV SRAM 256B fast wipe NV SRAM	Bare die

+Denotes a lead(Pb)-free/RoHS-compliant package.
**EP = Exposed pad.*

Package Information

For the latest package outline information and land patterns (footprints), go to **www.maximintegrated.com/packages**. Note that a "+", "#", or "-" in the package code indicates RoHS status only. Package drawings may show a different suffix character, but the drawing pertains to the package regardless of RoHS status.

PACKAGE TYPE	PACKAGE CODE	OUTLINE NO.	LAND PATTERN NO.
40 TQFN-EP	T4055+1	21-0140	90-0016

Note to readers: This document is an abridged version of the full data sheet. To request the full data sheet, go to **www.maximintegrated.com/MAXQ1050** and click on **Request Full Data Sheet**.