

November 15, 2023



To Meet And Exceed Heightened Automotive Secure Authentication Requirements, Microchip Releases Its Latest TrustAnchor Security IC

Available as a CryptoAuthentication™ or CryptoAutomotive™ Secure IC, the new TA101 device focuses on larger key sizes and enhanced cybersecurity requirements

CHANDLER, Ariz., Nov. 15, 2023 (GLOBE NEWSWIRE) -- As vehicles become more connected and technologically advanced, the need for heightened security measures also rises. New government and automotive OEM cybersecurity requirements are beginning to include larger key sizes and Edwards Curve ed25519 algorithm standards. In response, Microchip Technology (**Nasdaq: MCHP**) has launched its latest TrustAnchor Security IC, [the TA101](#), which can accommodate complex automotive and embedded security use cases. The TA101 supports large key sizes up to ECC P521, SHA512, RSA-4K and AES256 with greater security strength, exceeding current standards and allowing room for future adjustments while maintaining backwards compatibility for smaller keys. The TA101 is offered as an industrial-grade [CryptoAuthentication™](#) Security IC and as a [CryptoAutomotive™](#) Security IC supporting AEC-Q100 Grade 1 qualified devices.

As the latest device in Microchip's portfolio of security ICs, the TA101 is specifically designed to support automotive security, data center and industrial applications. The cryptographic companion device works alongside a microcontroller (MCU) or microprocessor (MPU) to handle cryptographic functions including public key infrastructure, certificate management and secure key storage requirements. The TA101 offers easy patch updates, message authentication, Transport Layer Security (TLS), secure boot, High-bandwidth Digital Content Protection (HDCP), firmware updates, security upgrades, transfer of ownership, key management and WPC Qi® 1.3 authentication.

"It is critically important for OEMs to not only comply with current standards but to stay a step ahead when it comes to security. By introducing key sizes associated with 256 bits of security strength, the TA101 offers great key strength diversity now and for future applications," said Nuri Dagdeviren, corporate vice president of Microchip's Secure Computing Group. "Additionally, Microchip's modular security solution approach allows customers to choose an optimally sized and priced MCU based on the focus application of the module, while standardizing a single security solution that satisfies virtually all security requirements."

The TA101 delivers an alternative architecture to on-die multicore MCU/MPU management of in-vehicle networking by offering an off-chip component to handle secure boot and message authentication. The device is compatible with a wide range of MCUs or MPUs, enabling flexible solutions that can help lower costs and reduce time to market.

The TA101 offers the Commercial National Security Algorithm (CNSA) required 1.0 suite of algorithms and the ed25519 curve in a single IC. Reducing the risk associated with secure code development and implementation, it comes preprogrammed and pre-provisioned in Microchip Common Criteria ALC_DVS.2 certified facilities. To learn more about Microchip's automotive security portfolio, visit the **CryptoAutomotive Security IC** page on the company's website.

Development Tools

The TA101 is supported by the [CryptoAuth Trust Platform Development Kit](#) and several TA101 socket boards that feature a mikroBUS™ connector. These socket boards can also be used with the [mikroBUS Xplained Pro Extension Board](#), which connects to a wide variety of Xplained Pro boards for developing designs with SAM MCUs.

The TA101 AUTOSAR® Microcontroller Abstraction Layer (MCAL) is ASPICE Level 2 compliant. Microchip's CryptoAuthentication Library of software allows seamless integration into industry-standard operating systems or customized software stacks for crypto functions. The Trust Platform Development Suite (TPDS) can be used to configure prototypes and prepare them for provisioning at Microchip's secure factories.

Pricing and Availability

The TA101 is available starting at \$1.60 each in 10,000-unit quantities. For additional information and to purchase, contact a Microchip sales representative, authorized worldwide distributor or visit Microchip's Purchasing and Client Services website, www.microchipdirect.com.

Resources

High-res images available through Flickr or editorial contact (feel free to publish):
<https://www.flickr.com/photos/microchiptechnology/53299833557/sizes//>

About Microchip Technology:

Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control solutions. Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 125,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at www.microchip.com.

Disclaimers and Notices

Performance varies by use, configuration and other factors. Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. No product or component can be absolutely secure. Your costs and results may vary.

Statements in this document that refer to future plans or expectations are forward-looking statements. These statements are based on current expectations and involve many risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. For more information on the factors that could cause actual

results to differ materially, see our most recent earnings release and SEC filings at www.microchip.com.

Note: The Microchip name and logo, the Microchip logo are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries. CryptoAutomotive and CryptoAuthentication are trademarks of Microchip Technology Inc. in the U.S.A. and other countries. All other trademarks mentioned herein are the property of their respective companies.

Editorial Contact:

Amber Liptai
480-792-5047
amber.liptai@microchip.com

Reader Inquiries:

1-888-624-7435

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/009ee98f-4e2b-4263-8ffd-fee72c1c670b>



TA101 TrustAnchor Security IC



To Meet And Exceed Heightened Automotive Secure Authentication Requirements, Microchip Releases Its Latest TrustAnchor Security IC

Source: Microchip Technology Inc.