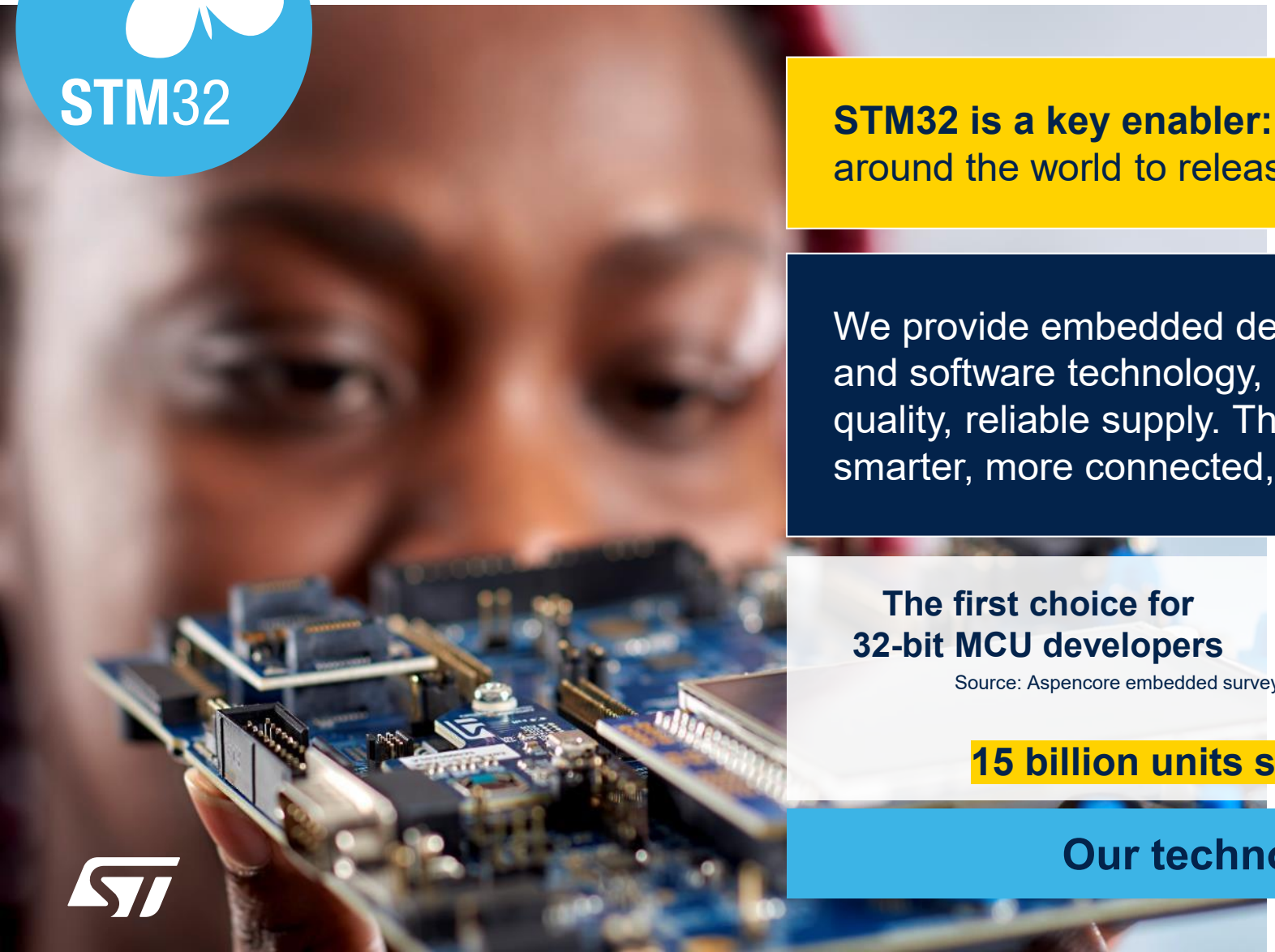
Releasing your creativity

Discover the STM32 family of microcontrollers & microprocessors

STM32

STM32: a developer-first strategy since 2007



STM32 is a key enabler: empowering embedded developers around the world to release their creativity.

We provide embedded developers with cutting-edge hardware and software technology, comprehensive support, and high-quality, reliable supply. This helps them build designs that are smarter, more connected, and more secure.

The first choice for 32-bit MCU developers

Source: Aspencore embedded survey, 2022

#1 GP MCU Worldwide

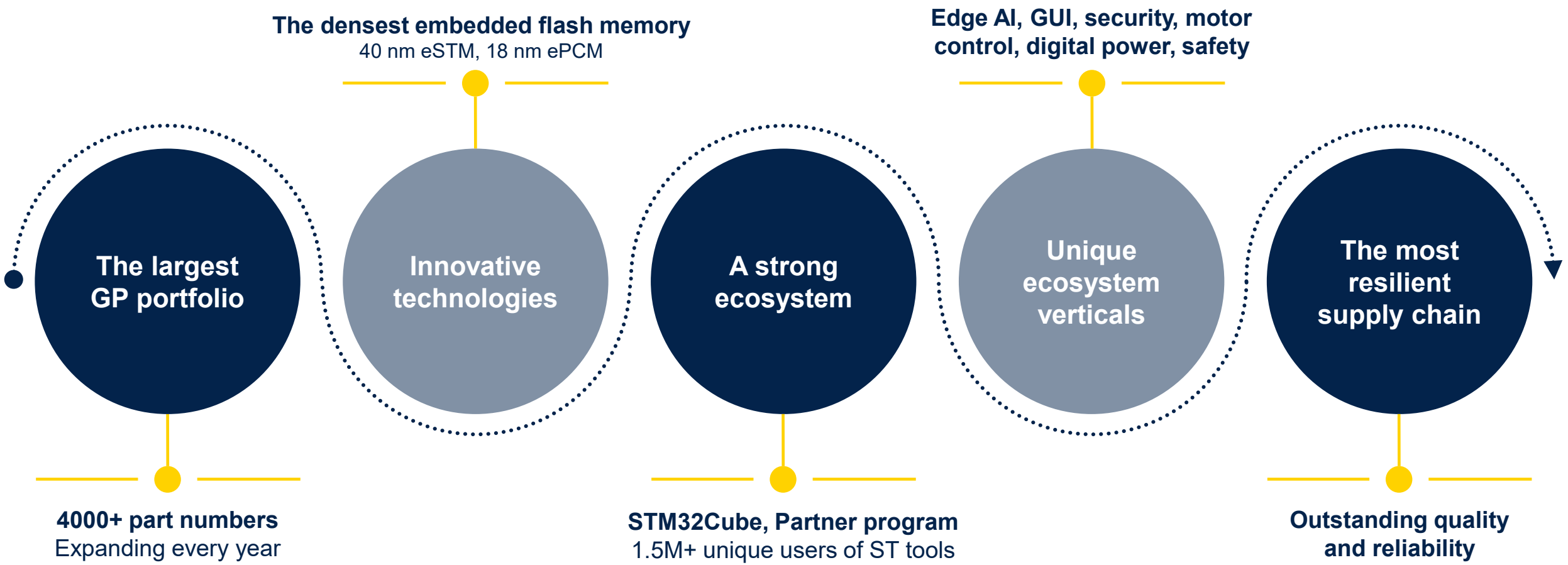
Source: OMDIA CLT, 2022, 2023, 2024

15 billion units sold

100,000+ customers

Our technology starts with You

What makes STM32 unique?



Supporting developers' needs

STM32

More wireless connectivity

More advanced security

STM32 Trust

More autonomous decisions embedding AI

More application specific added value IP

More wired connectivity

Lower power

More computing power
32-bit CPU
Arm® Cortex®-based
Real-time OS
(up to two cores)

Flexible memory interfaces

More embedded flash — Optional

What the STM32 products offer

Real-time performance

- Powerful Cortex® cores
- Multicore performance
- Fast interfaces
- Hardware accelerators

Outstanding power efficiency

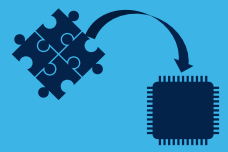
- Ultra-low dynamic power consumption
- Long lifetime, small battery
- Sustainable technology

Advanced, innovative peripherals

- Graphic acceleration
- Digital & analog peripherals
- USB Type-C®
- Peripherals for wireless and edge AI solutions

Optimized integration

- Best fit for application requirements (package size, cost, performance)
- Safety & security features



Extensive ecosystem

- Comprehensive development tools
- Wide range of partners
- Community support

4,000+ commercial part numbers

Rolling 10-year longevity commitment for continuous supply

The STM32 portfolio

Five product categories

Wireless MCU

Short- and long-range connectivity

Ultra-low-power MCU

Mainstream MCU

High-performance MCU

32-bit general-purpose microcontrollers: from 75 to 5,072 CoreMark score

Embedded MPU

32- and 64-bit microprocessors





Enabling edge AI solutions

Scalable security

MPU portfolio

MCU portfolio

STM32 portfolio

LONGEVITY 10 YEARS COMMITMENT

MPU

STM32MP1
1 GHz Cortex®-A7
209 MHz Cortex®-M4

STM32MP2
Dual 1.5 GHz Cortex®-A35
400 MHz Cortex®-M33

High-performance MCUs

STM32F7
1,082 CoreMark
216 MHz Cortex®-M7

STM32N6
3,360 CoreMark
800 MHz Cortex® -M55
Neural processing unit

STM32V8
Up to 5,072 CoreMark
800 MHz Cortex®-M85

STM32F2
398 CoreMark
120 MHz Cortex®-M3

STM32F4
608 CoreMark
180 MHz Cortex®-M4

STM32H5
1,023 CoreMark
250 MHz Cortex®-M33

STM32H7
3,347 CoreMark
Up to 600 MHz Cortex® -M7
240 MHz Cortex® -M4

Mainstream MCUs

STM32F3
245 CoreMark
72 MHz Cortex®-M4

STM32G4
569 CoreMark
170 MHz Cortex®-M4

Mixed-signal MCUs

STM32C0
114 CoreMark
48 MHz Cortex® M0+

STM32F0
106 CoreMark
48 MHz Cortex®-M0

STM32G0
142 CoreMark
64 MHz Cortex®-M0+

STM32F1
177 CoreMark
72 MHz Cortex®-M3

Ultra-low-power MCUs

STM32L0
75 CoreMark
32 MHz Cortex®-M0+

STM32U0
140 CoreMark
56 MHz Cortex®-M0+

STM32L4
273 CoreMark
80 MHz Cortex®-M4

STM32U3
393 CoreMark
96 MHz Cortex®-M33

STM32L4+
409 CoreMark
120 MHz Cortex®-M4

STM32L5
443 CoreMark
110 MHz Cortex®-M33

STM32U5
651 CoreMark
160 MHz Cortex®-M33

Wireless MCUs

STM32WL
162 CoreMark
48 MHz Cortex®-M4
48 MHz Cortex®-M0+

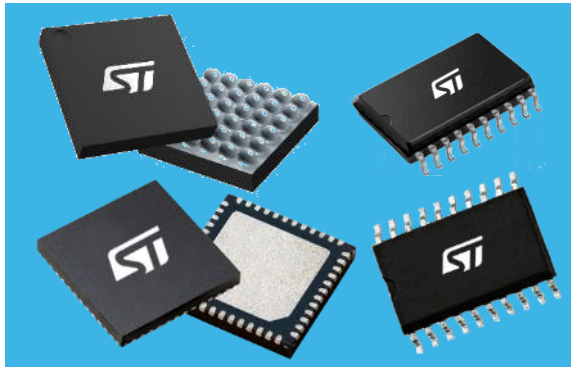
STM32WB0
156 CoreMark
64 MHz Cortex®-M0+

STM32WB
216 CoreMark
64 MHz Cortex®-M4
32 MHz Cortex®-M0+ ●

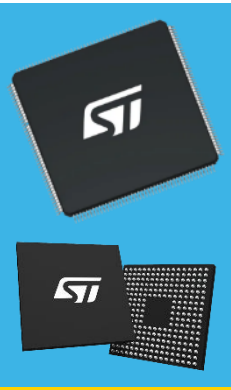
STM32WBA
407 CoreMark
100 MHz Cortex®-M33

Latest product generation ● Radio coprocessor only ▭ New series or lines introduced in 2025 ▭ Preannouncement

Addressing entry-level to high-performance applications



90+ package types from 5 to 784 mm²



20- to 68-pin QFN
18- to 208-pin WLCSP
20-pin TSSOP
8-pin SO
32- to 208-pin LQFP
64- to 273-pin BGA

Multiple memory options

From 8 Kbytes to 4 Mbytes of flash memory
From 2 Kbytes to 4.2 Mbytes of RAM

STM32C0

Arm Cortex M0+
8 pins
16 Kbytes of flash
48 MHz

XXS

XXL

STM32V8*

Arm Cortex-M85
273 pins
4 Mbytes of embedded NVM
Up to 800 MHz

(*) available soon

STM32 high-performance MCUs

STM32 high-performance MCUs

Up to 3360 CoreMark and a rich set of peripherals

Preannouncement

STM32V8
- Arm® Cortex®-M85 at 800 MHz – 2400 DMIPS
- 4 MB embedded NVM
- World-first MCUs built on 18nm process technology

STM32N6
- Arm® Cortex®-M55 at 800 MHz – 1280 DMIPS
- 4.2 MB embedded RAM
- First MCU with NPU: ST Neural-ART @ 600Gops

STM32H5
- Arm® Cortex®-M33 at 250 MHz – 375 DMIPS
- From 128 Kbytes to 2 Mbytes of Flash memory
- High performance, scalable security, affordable

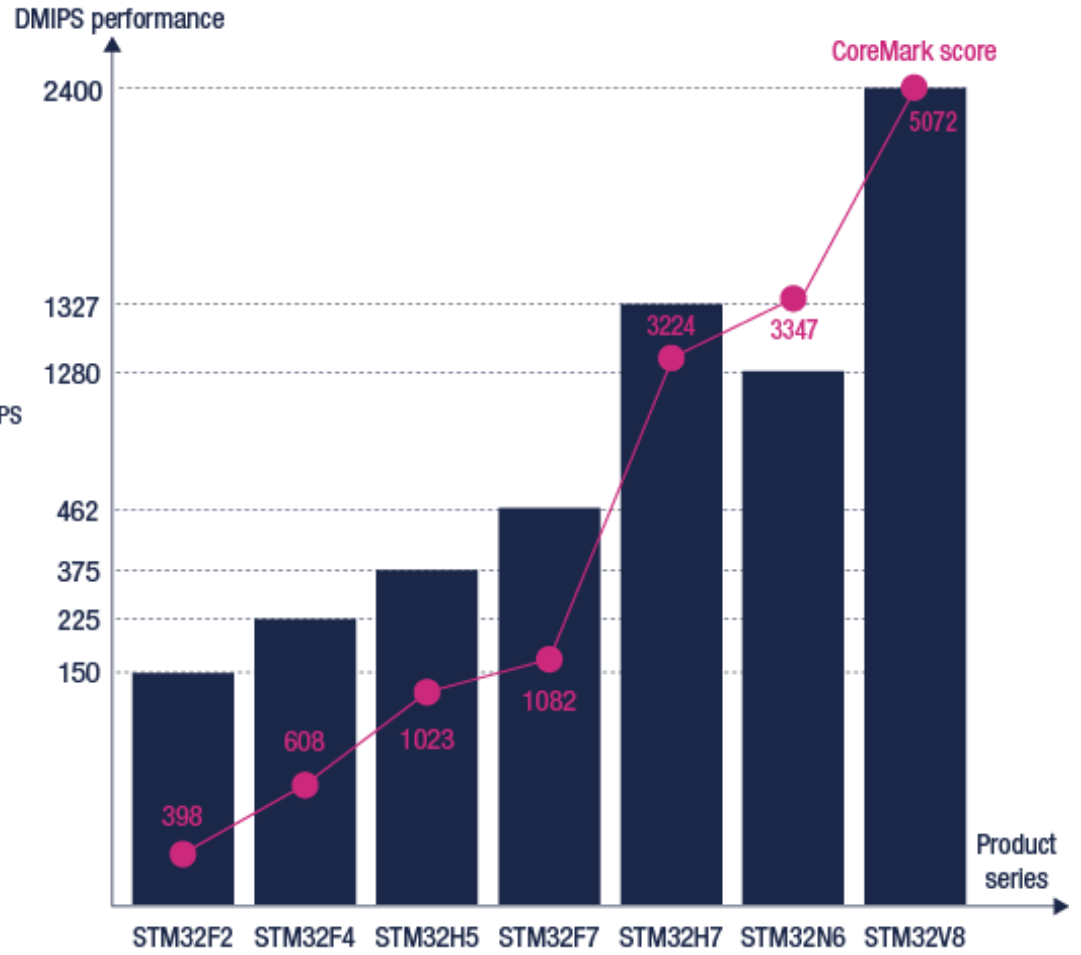
STM32H7
- Arm® Cortex®-M7 + Arm® Cortex®-M4 FPU at 480 MHz – 1327 DMIPS and up to 600 MHZ - 1284 DMIPS on single core Arm® Cortex®-M7
- From 64 Kbytes to 2 Mbytes of Flash memory
- High Performance, scalable memory and security

STM32F7
- Arm® Cortex®-M7 + FPU at 216 MHz – 462 DMIPS
- From 256 Kbytes to 2 Mbytes of Flash memory
- Embedded flash & external memories

STM32F4
- Arm® Cortex®-M4 + FPU up to 180 MHz – 225 DMIPS
- From 64 Kbytes to 2 Mbytes of Flash memory
- Cost-effective and power efficiency

STM32F2
- Arm® Cortex®-M3 at 120 MHz – 150 DMIPS
- From 128 Kbytes to 1 Mbyte of Flash memory
- Foundation lines for performance and connectivity

Legend: Latest product series/lines generation



STM32V8 MCU series
Setting new performance levels

Cutting edge Arm® Cortex®-M85 core with Helium
Performance boost in scalar, DSP, and ML versus Cortex®-M7
Up to 800 MHz frequency

World-first MCU built on 18 nm FD-SOI and PCM
High density: larger program embedded NVM (4 Mbytes)
140°C junction temperature

Strong security with regulatory compliance
PSA Certified L3 and SESIP3 security targets

STM32N6 MCU series edge AI acceleration

Enabling high-performance edge AI on MCUs

- Embedded proprietary neural processing unit, ST Neural-ART accelerator.
- 600 GOPS / 3 TOPS/W power consumption

The most powerful STM32 series ever made

- 800 MHz Arm Cortex®- M55 core
- 1280 DMIPS / 3360 CoreMark

Elevating graphics & multimedia experiences

- Multiple graphics accelerators + multimedia encoder/decoder
- Computer vision pipeline

Streamlined developpment and integration

- Supported by ST Edge AI Suite tools, resources, & case studies
- Compatible with the TouchGFX packages for graphics

STM32H7Rx/Sx MCU lines
A scalable bootflash approach

Max performance: 600 MHz bootflash MCU

- Real-time execution from internal or external memories
- High speed serial & parallel memory interfaces up to 200MHz DTR. Large internal SRAM

High scalability to optimize your design & reduce costs

- Flexible external memory capacity
- 10 packages from cost-effective 68 up to 225 pins

Security assurance: ready for future security directives

- Target security certifications: SESIP Level 3 and PSA certified L3.
- On-the-fly decrypt/encrypt & secure boot

Best-in-class platform for graphics applications

- Powerful 2.5D NeoChrom GPU. Smart DMA architecture memory/GPU
- Enabling UIs with HD resolution

STM32H5 MCU series for high performance and strong security

Most powerful Arm® Cortex®-M33 MCU

Industry-first 32-bit MCU with Arm® Cortex®-M33 core running as high as 250 MHz.

Scalable security to address every need

From the most essential security building blocks to fully certified services maintained by ST. First STM32 with TEE.

Optimized cost/performance trade-off

Based on ST's optimized 40 nm process technology.

Large choice of memory, peripherals, and package options.

STM32 mainstream MCUs

STM32 mainstream MCUs

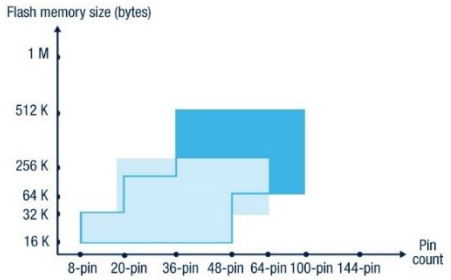
Latest product generation

STM32C0

- Arm Cortex-M0+ at 48 MHz – 44 DMIPS
- Most affordable entry-cost STM32 32-bit MCU
- Affordable, reliable, continuum with STM32G0

STM32G0

- Arm Cortex-M0+ at 64 MHz – 59 DMIPS
- Maximum IO count per package
- Advanced function is analog, low-power, control



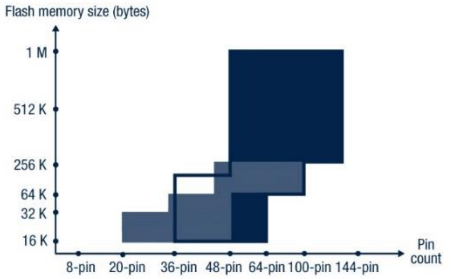
Legacy product

STM32F1

- Arm Cortex-M3 at 72 MHz – 61 DMIPS
- STM32 Foundation line
- Wide range of performance and peripherals, easy-to-tuse tools

STM32F0

- Entry-level MCU for cost-sensitive operations
- Arm Cortex-M0 at 48 MHz – 38 DMIPS



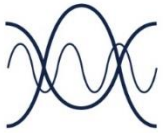
Mixed-signal MCUs

STM32G4

- Arm Cortex-M4 + FPU at 170 MHz – 213 DMIPS
- Rich analog peripheral set
- High-resolution timer
- Mathematical accelerators

STM32F3

- Arm Cortex-M4 + FPU at 72 MHz – 90 DMIPS
- Rich analog peripheral set
- High-resolution timer



Instrumentation & Measurement

Digital Power

Motor Control

STM32C0 MCU series making 32-bit capabilities accessible to all

ST's most compact and affordable 32-bit MCU now supports USB and FDCAN.

Affordable

Reduce costs thanks to an attractive price point and an optimized BOM. Starting at $0.21.

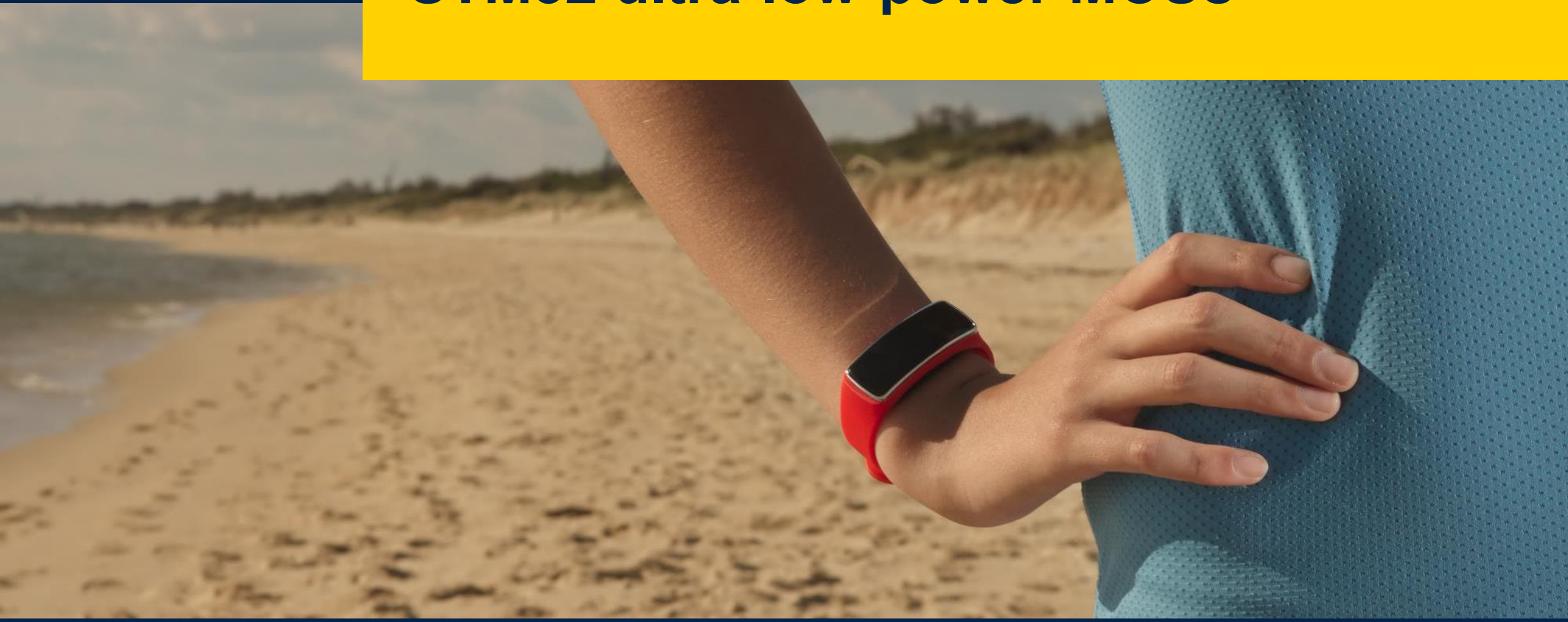
Reliable

- Monitoring and diagnostic features for safe behavior.
- High accuracy internal high-speed clock.

Flexible

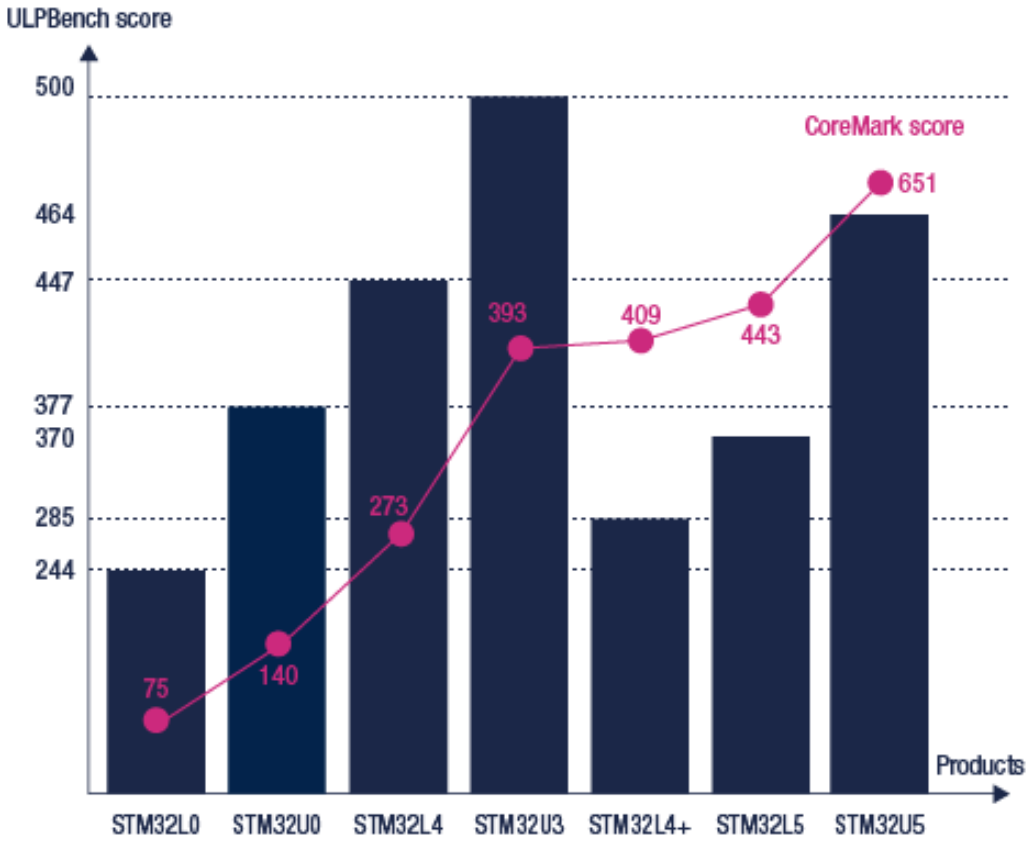
- Flexible function mapping for optimized layout.
- Common platform & consistent pinout with STM32G0.

STM32 ultra-low-power MCUs



STM32 ultra-low-power MCUs

STM32U5	• 32-bit Arm® Cortex®-M33 + FPU at 160 MHz • From 128 to 4 Mbytes of Flash memory • Lowest power mode with RAM + RTC: 0.35 µA
STM32L5	• 32-bit Arm® Cortex®-M33 + FPU at 110 MHz • From 256 to 512 Kbytes of Flash memory • Lowest power mode with RAM + RTC: 0.35 µA
STM32L4+	• 32-bit Arm® Cortex®-M4 + FPU at 120 MHz • From 512 Kbytes up to 2 Mbytes of Flash memory • Lowest power mode with RAM + RTC: 0.39 µA
STM32U3	• 32-bit Arm® Cortex®-M33 + FPU at 96 MHz • From 512 Kbytes to 1 Mbytes of Flash memory • Lowest power mode with RAM + RTC: 0.95 µA
STM32L4	• 32-bit Arm® Cortex®-M4 + FPU at 80 MHz • From 64 Kbytes to 1 Mbyte of Flash memory • Lowest power mode with RAM + RTC: 0.34 µA
STM32U0	• 32-bit Arm® Cortex®-M0+ at 56 MHz • From 16 to 256 Kbytes of Flash memory • Lowest power mode with RAM + RTC: 0.25 µA
STM32L0	• 32-bit Arm® Cortex®-M0+ at 32 MHz • From 8 to 192 Kbytes of Flash memory • Lowest power mode with RAM + RTC: 0.67 µA



Legend: Latest product series/lines generation

STM32U3 MCU series: market-leading power efficiency

Extending battery life and protecting data in cost-sensitive industrial, medical, and consumer devices.

First STM32 with near-threshold design
Significantly reduces dynamic consumption.

Market-leading efficiency with 117 CoreMark/mW
Five times more efficient vs previous product generation.

Standard & extended industrial temperature support
-40 up to +85°C and +105°C.

STM32U5 series
The flagship of ultra-low-power MCUs

NeoChrom GPU
Vector graphics

For IoT & embedded applications, up to 4 Mbytes of flash memory

1st MCU certified by the NIST*

High energy efficiency/integration
Innovative power management features. Low power background.d autonomous mode (LPBAM), DMA, and IP autonomous in LP mode.

High security & safety
AES and PKA, side attack resistant. PSA-Certified and SESIP Level 3 target certifications.
ECC on flash memory and SRAM.

Enhanced graphic performance
First STM32 with advanced graphics accelerators (ART Accelerator) & NeoChrom Vector Graphics GPU based on Arm® Cortex® -M33 running at 160 MHz.

**** the National Institute of Standards and Technology*** promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

STM32U0 series: the latest generation of entry-level, ultra-low-power MCUs

The ideal combination between energy consumption, features, and cost.
Enabling more design freedom in entry-level, battery-operated devices

Energy savings & longer product usage

Best-in-class static consumption.
Many ultra-low-power modes for greater flexibility.

Integrated features

High integration, incl. LCD driver, MSI internal oscillator, ART accelerator, security and more.

Cost effectiveness

Lower BOM costs thanks to high integration.
Attractive price point.
Building on proven STM32 ULP series for faster time to market.

STM32 wireless MCUs

STM32 wireless MCUs

STM32WB0

- Arm® Cortex®-M0+ at 64 MHz
- From 192 Kbytes to 512 Kbytes of Flash memory
- Output power: +8 dBm
- Sensitivity: -97 dBm (1Mbps) / -104 dBm (125Kbps)

STM32WL

LoRaWAN sigfox M-Bus mioty amazon sidewalk

- Arm® Cortex®-M4 and -M0+ at 48 MHz supporting RF
- From 64 Kbytes to 256 Kbytes of Flash memory
- Dual output power: Up to 15 dBm / Up to 22 dBm
- Sensitivity LoRa®: -148 dBm

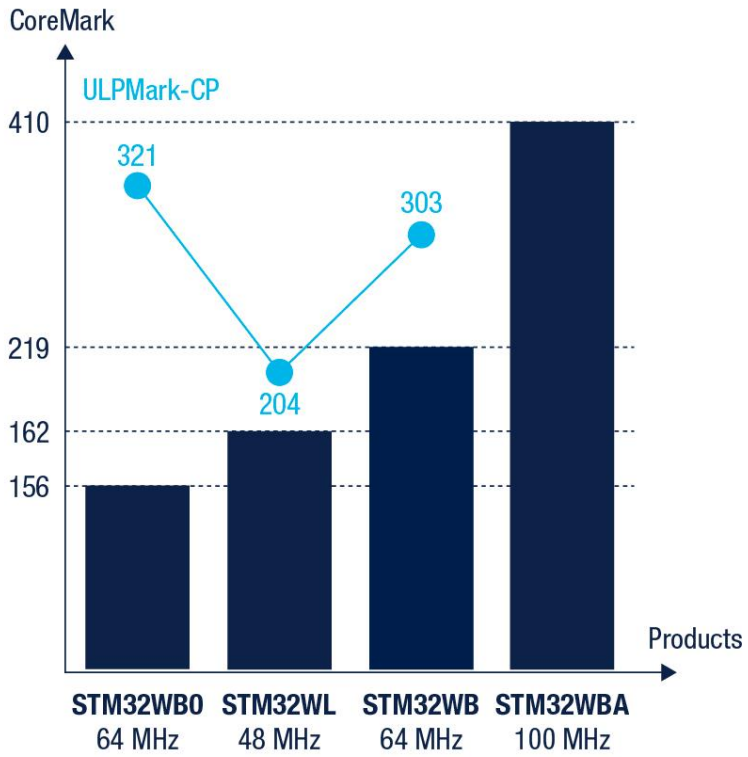
STM32WB

- Arm® Cortex®-M4 at 64 MHz and dedicated M0+ at 32 MHz supporting RF
- From 256 Kbytes to 1 Mbyte of Flash memory
- Output power: +6 dBm
- Sensitivity BLE: -96 dBm, 802.15.4: -100dBm

STM32WBA

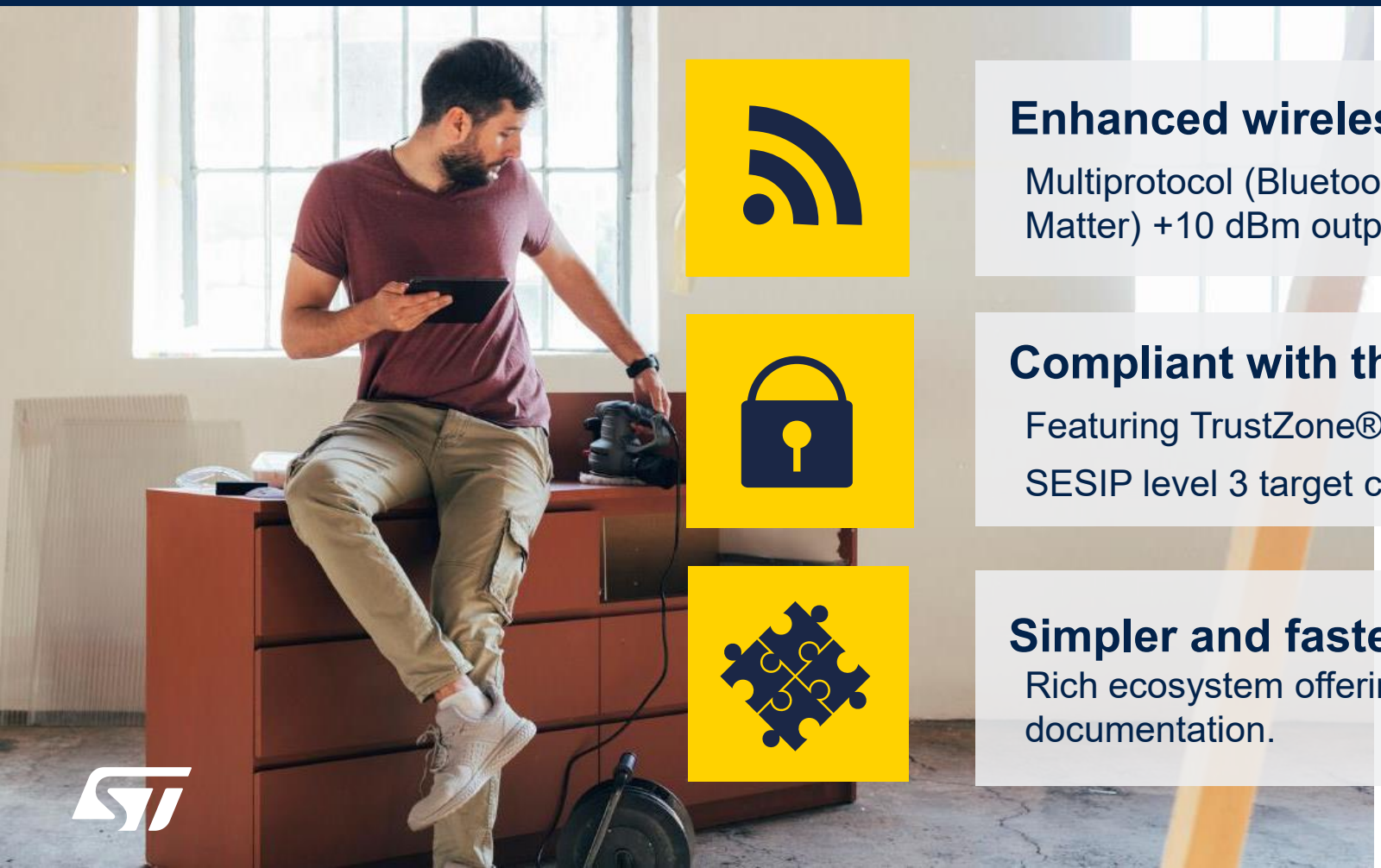
amazon sidewalk

- Arm® Cortex®-M33 + FPU at 100 MHz
- From 512 Kbytes to 2 Mbytes of Flash memory
- Output power: +10 dBm
- Sensitivity BLE: -96 dBm, 802.15.4: -97.5 dBm



STM32WBA MCU series: performance & reliability

Faster time-to-market and higher performance for wireless short-range devices



Enhanced wireless performance

Multiprotocol (Bluetooth® Low Energy, Zigbee, OpenThread, Matter) +10 dBm output power with low power consumption.

Compliant with the latest security regulations

Featuring TrustZone® technology.

SESIP level 3 target certification.

Simpler and faster development

Rich ecosystem offering hardware, embedded software & tools, documentation.

STM32WB0 MCU series: performance, efficiency, and security for the IoT

Short-range wireless MCU, 2 Mbps, adverting extension
+8 dBm, isochronous channel, high security level

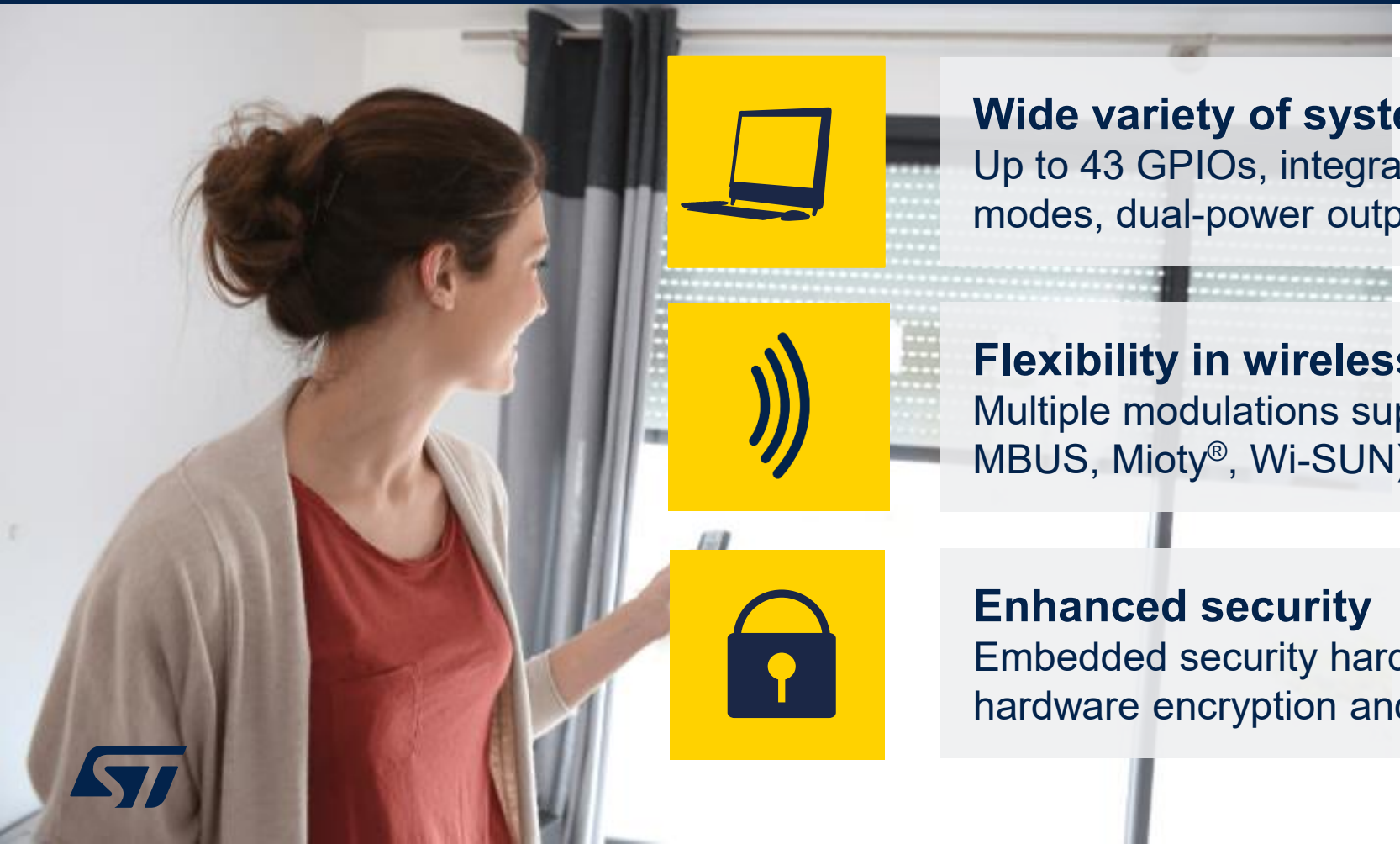
Certified for Bluetooth® LE 5.4
Upgradable, highly modular, and robust Bluetooth® LE stack, developed and maintained by ST.

High wireless performance
System performance: Arm® Cortex® -M0+ core at 64 MHz.
Best-in-class radio enabling robust and stable connectivity.

Longer battery life for IoT devices
High efficiency: 15.5 µA/MHz from Cortex-M0+ and 3.9 mA radio peak Tx current / 3.2 mA radio peak Rx current.

STM32WL MCU series: efficient long-range communications

A highly integrated, low-power MCU featuring a sub-GHz radio



Wide variety of system peripherals
Up to 43 GPIOs, integrated SMPS, multiple low-power modes, dual-power output.

Flexibility in wireless applications
Multiple modulations supported (LoRaWAN®, Sigfox, W-MBUS, Mioty®, Wi-SUN).

Enhanced security
Embedded security hardware functions such as AES hardware encryption and read/write protection.

STM32 microprocessors

STM32 microprocessors making your industrial applications future-proof

NEW

STM32MP25 and STM32MP23

Single or dual Arm® Cortex®-A35 up to 1.5 GHz
Arm® Cortex®-M33 at 400 MHz
NPU at 1.35 TOPS (0.6 TOPS for MP23x)
time-sensitive networking support
3D GPU, 1080p platform

STM32MP15

Single or dual Arm® Cortex®-A7 up to 800 MHz
Arm® Cortex®-M4 at 209 MHz
3D GPU 720p

STM32MP13

Arm® Cortex®-A7 up to 1 GHz
Power- and cost-efficient with high security

STM32MP2 series

STM32MP1 series

STM32MP13 MPU lines

Cost-efficient MPUs for industrial and secure applications

Power efficiency

- Best-in-class consumption in low power modes
- Over 90% energy savings in standby and VBAT modes

Certified security services for faster time to market

- SESIP L3 and PSA Certified
- PCI ready

Accessible

- Strong, user-friendly ecosystem (OpenSTLinux, Linux-RT, RTOS)
- PCB layout reference designs

STM32MP25 MPU product lines a step up in performance

Robustness for complex industrial applications

- Industrial-grade MPU
- 10-year rolling longevity program

64-bit MPU with advanced compute capabilities, including edge AI acceleration

- NPU accelerator (up to 1.35 TOPS), run AI on CPU, GPU, or NPU
- Multimedia capabilities (1080p, 3D GPU, LVDS/DSI, and more)

Supporting the growth of connected applications

- Hardware interfaces: TSN support, up to 3 gigabit Ethernet ports (with 2-port switch), PCIe Gen2, USB 3.0, 3 x CAN-FD
- Software & third-party ecosystem

Strong security

- SESIP3 certification target, TrustZone® on Cortex®-A & Cortex®-M,
- Secure provisioning ecosystem, Secure isolation for edge confidential computing

Sampling Q4 2023 / Production Q2 2024

STM32MP23 MPU product lines cost-optimized MPUs

Robustness for complex industrial applications

- Industrial-grade MPU
- 10-year rolling longevity program

64-bit MPU with advanced compute capabilities, including edge AI acceleration

- NPU accelerator (up to 0.6 TOPS), run AI on CPU, GPU, or NPU
- Multimedia capabilities (1080p, 3D GPU, LVDS/DSI, and more)

Supporting the growth of connected applications

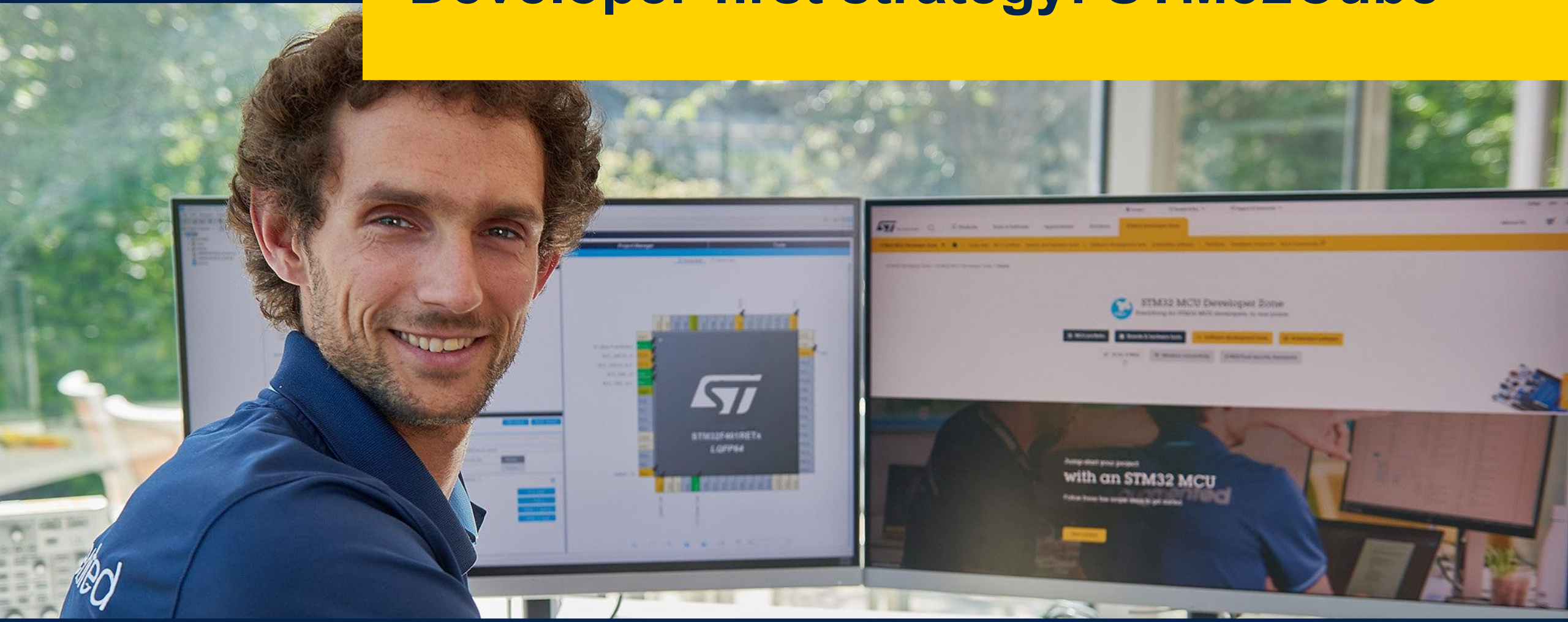
- Hardware interfaces: 2 gigabit Ethernet ports, 2 x CAN-FD
- Software: Extended maintenance: OpenSTLinux family (Yocto, Buildroot, OpenWRT, OpenSTDroid) extended from 2 years to 5 years
- Third-party ecosystem

Strong security

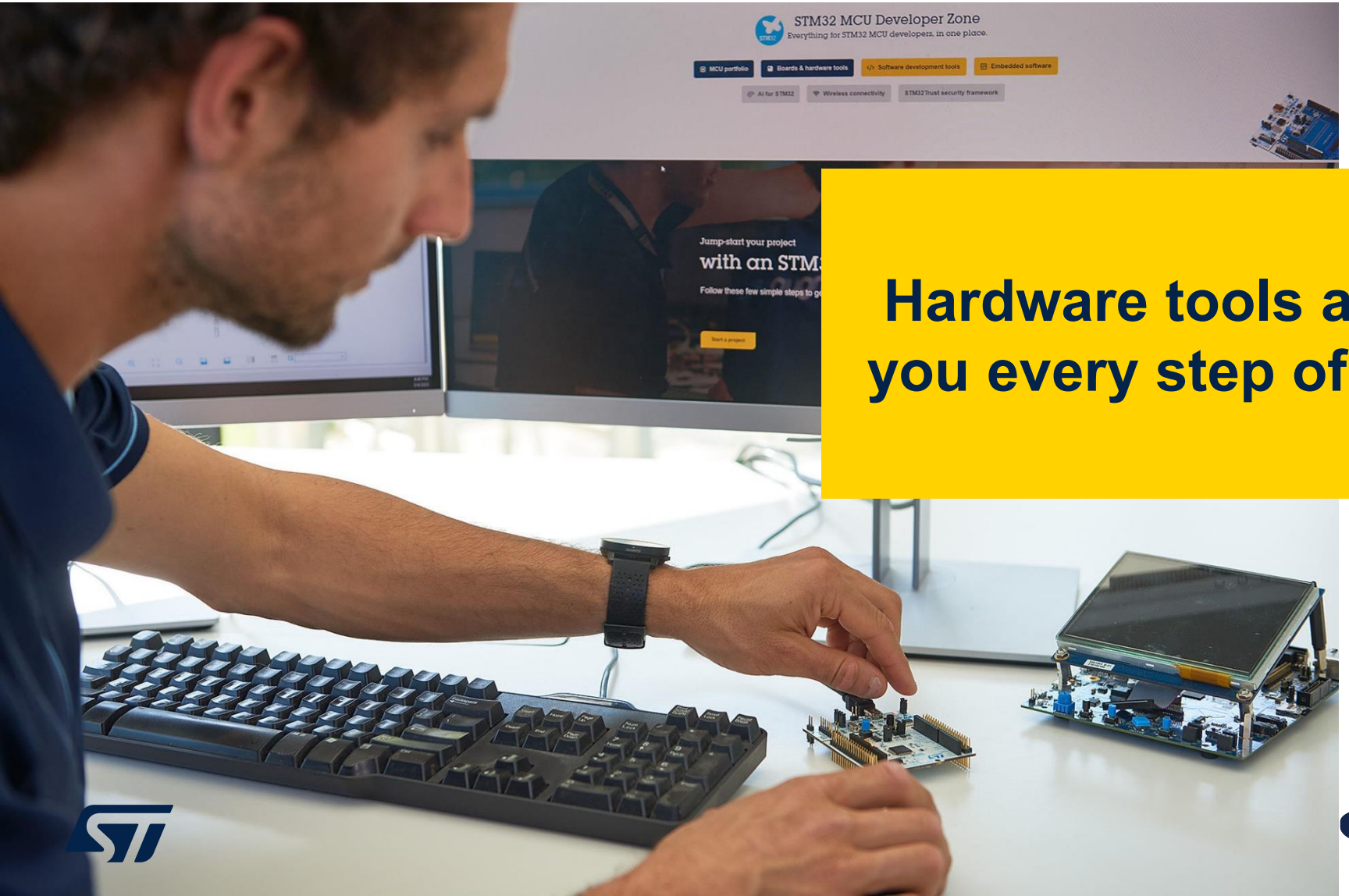
- SESIP3 certification target, TrustZone® on Cortex®-A & Cortex®-M,
- Secure provisioning ecosystem, Secure isolation for edge confidential computing

Sampling Q4 2024 / Production Q2 2025

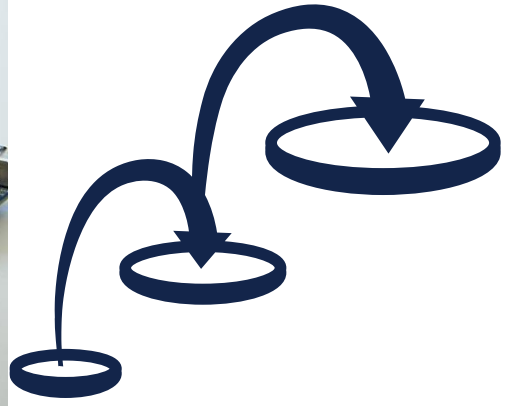
Developer-first strategy: STM32Cube



STM32Cube design ecosystem



Hardware tools and software helping you every step of your design journey



STM32Cube framework

Helping developers release their creativity

Comprehensive offer helping you accelerate your development

Focus on quality, compatibility, and stability

Documentations, training and worldwide support channels

STM32 MCU and MPU Developer Zone
Everything for STM32 developers in one place

Applicative reference implementations

Extension libraries and AI toolkit

Hardware

Embedded SDK

Development tool kit

Development resources

STM32Cube framework

Tools and software supporting you during all your design steps

Evaluation, prototyping, and selection

STM32 Finder

STM32 boards

Hardware and software configuration

STM32 CubeMX

Application development and debug

STM32 CubeMCU Packages

STM32 CubeExpansion & Verticals and partner solutions

STM32 CubeIDE & Partner IDEs

Code and hardware options programming

STM32 CubeProgrammer & Programmers from partners

Runtime application monitoring

STM32 CubeMonitor

Worldwide support channels

STM32 hardware evaluation tools

Easy prototyping, accurate evaluation, and board design references

$10 → $30*

STM32 Nucleo boards

Flexible prototyping

70+ references

$10 → $100*

Discovery kits

Evaluating key features

40+ references

$100 → $500*

Evaluation boards

Full feature evaluation

25+ references

Expansion boards | **Accessories**

Add-on functionalities

100+ references

Partner boards

From full evaluation to open hardware

20+ references

**recommended resell price (RRP)*

STM32CubeMCU Packages

Efficient and flexible access to the MCU features

LL drivers	HAL drivers
Lower abstraction level	Higher abstraction level
Lower code size	Higher portability and reuse

MISRA C compliant, statically analyzed, rigorously tested

A large set of production-ready examples

Available from st.com, GitHub, or STM32Cube tools

STM32CubeMCU Packages

Faster development with an optimized and ported selection of market-reference middleware stacks

Middleware	Expansions
AzureRTOS ThreadX and FreeRTOS™ **AzureRTOS USBX** With support of audio, CDC, HID, DFU, PIMA, printer, and storage host and device classes **AzureRTOS NetXDuo** With support of TCP, UDP, IPv4, IPv6, http, MQTT, LWM2M, FTP, PPP, SMTP, and telnet **FileX and levelX** **USB PD and open bootloader** **Secure boot, Secure Manager API**	**TouchGFX graphics solution,** **Motor control,** **Artificial intelligence** **MEMS and sensors** **Secure cloud connectors** **Functional safety self-test library**

A large set of applicative examples

Available from st.com, GitHub, or STM32Cube tools

STM32 Developer Zone for MCUs & MPUs

Everything for STM32 MCU & MPU developers, in one place

A user-friendly environment to help developers every step of their design journey

Direct access to products, hardware and software tools, embedded software, developer resources

STM32 MCU Developer Zone

STM32 MPU Developer Zone

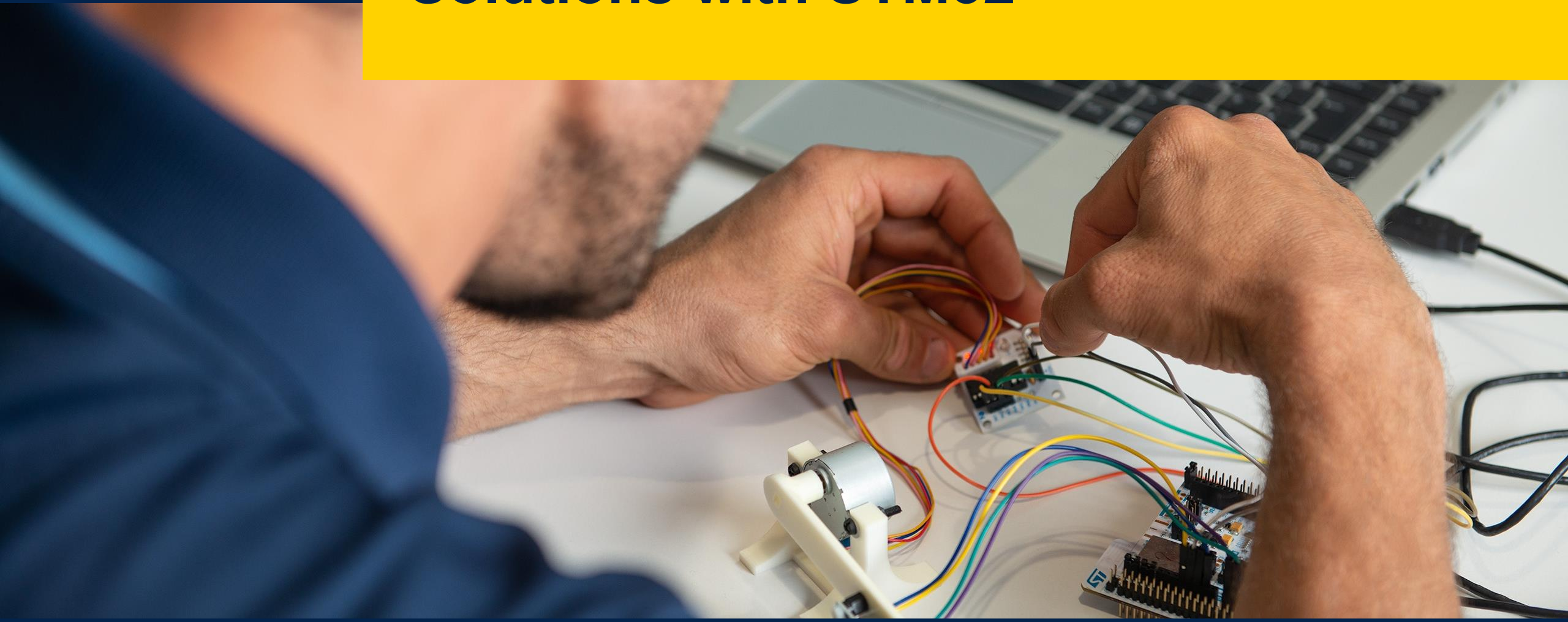
Watch the short video

A growing base of partners addressing customer challenges

- Software development tools
- Training
- Hardware development tools
- Engineering services
- Embedded software
- Design houses
- Evaluation boards
- Global services
- Development boards
- Companion devices
- Hardware integrated devices

Click to discover our partners

Solutions with STM32



Helping you build advanced HMIs with a comprehensive STM32 graphic offering

STM32 hardware
STM32 silicon and development boards

STM32 software
GUI development tools, GUI code Examples, library of graphical assets

Extensive ecosystem
Authorized Partner

NeoChrom GPU

NeoChrom GPU
Vector graphics

Introducing NeoChrom and NeoChrom VG GPU

The NeoChrom GPU offloads the CPU from the graphic computations, freeing up the memory and boosting performance. Fully supported in X-CUBE-TOUCHGFX.

Watch demos, tutorials, and more

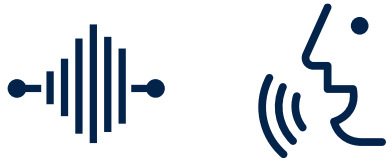
Making edge AI more accessible with STM32 solutions

Enabling major edge AI technologies

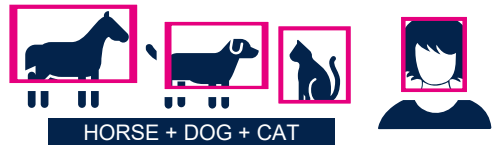
SENSING (TIME SERIES)

ANOMALY DETECTION

AUDIO



VISION



Software tools for any user profile

SENSING
AD

NANOEDGE AI STUDIO

User-friendly AutoML tool for STM32 MCUs

SENSING
AUDIO
VISION

STM32 Cube.AI

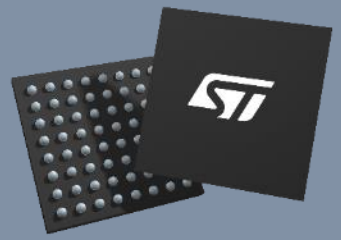
AI model optimizer and code generator for STM32 MCUs

SENSING
AUDIO
VISION

X-LINUX-AI

A complete AI framework for STM32 MPUs

Large choice of general purpose & accelerated hardware



STM32 MCUs

STM32N6 MCU

STM32MP1 & STM32MP2 MPUs

Fast-track your certification journey to meet functional safety standards with STM32

ST provides certified **functional safety packages** and documentation based on robust built-in MCU/MPU safety features.

- **SIL functional safety package**
  for industrial IEC 61508 (STM32)

SIL Ready

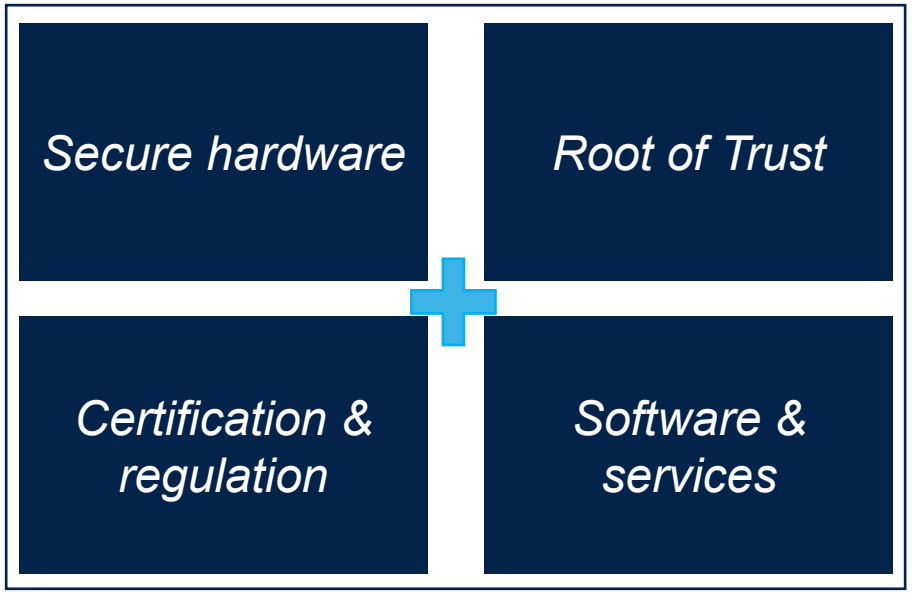
- **Class B functional safety package**
  for household electrical appliances
  IEC 60335-1/60730-1 (STM32 & STM8)

ClassB Ready

STM32 Functional Safety

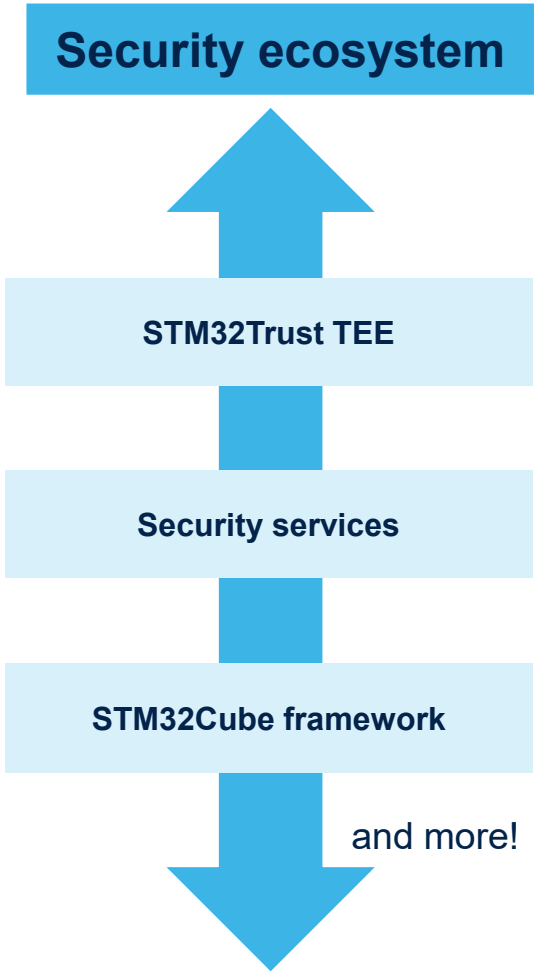
Security in STM32

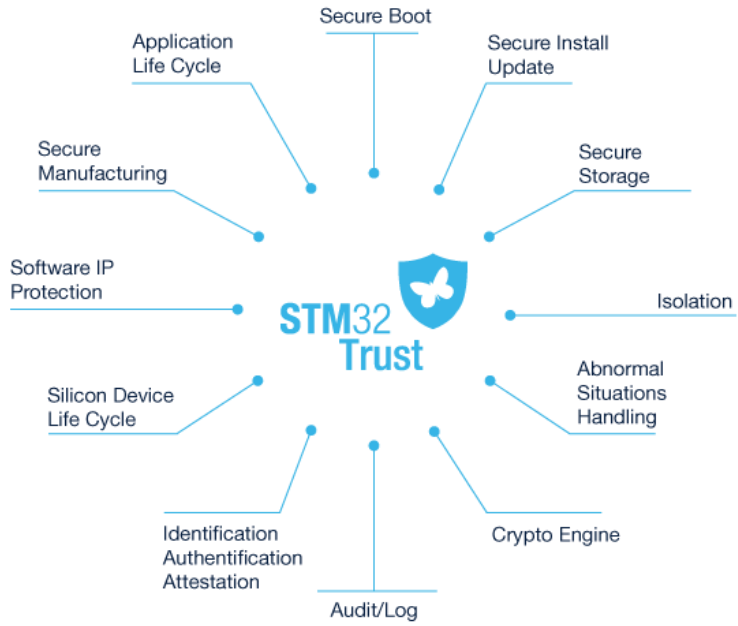
Building trust in embedded systems: the pillars of STM32Trust



psacertified™

Global Platform™ SESIP





Provide the right levels of security assurance thanks to the STM32Trust security functions

www.st.com/STM32Trust

STM32Trust – target certifications

MPU			STM32**MP15** **Native secure boot** TF-A + OPTEE	**PSAL1** **SESIP3** (PCI DSS) STM32**MP13** Native secure boot External Memory encryption	**PSAL3** **SESIP3** STM32**MP25** Native secure boot External Memory encryption	**PSAL3** **SESIP3** STM32**MP23**
High Perf MCUs	STM32**F2** STM32**F4**	STM32**F7**	**PSAL1** STM32**H7**	**PSAL3** **SESIP3** STM32**H5** Native secure boot **Secure Manager** **& ST-RoT**	**PSAL3** **SESIP3** STM32**H7S** Native secure boot ROMless	**PSAL3** **SESIP3** STM32**N6**
Mainstream MCUs		STM32**F3** ● STM32**F0**	STM32**F1**	**PSAL1** STM32**G4** ● Memory hide protect Feature	**PSAL1** STM32**G0** Memory hide protect Feature	**PSAL1** STM32**C0** Memory hide protect Feature
Ultra-low Power MCUs	**PSAL1** (PCI DSS) STM32**L4** X-CUBE-SBSFU with STSAFE support	**PSAL1** STM32**L4+**	**PSAL1** **SESIP3** STM32**L5** 1st STM32 With CM33 core	**PSAL3** **SESIP3** (PCI DSS) STM32**U5** 1st STM32 with secure storage hardware	**PSAL3** **SESIP3** STM32**U0**	**PSAL3** **SESIP3** STM32**U3**
Wireless MCUs		STM32**WL5**	**PSAL1** STM32**WL3**	STM32**WB** X-CUBE-SBSFU with Customer Key storage	**PSAL1** STM32**WB0**	**PSAL3** **SESIP3** STM32**WBA**

Note: information reflects highest die security targets

● **Mixed-signal MCUs**

Latest-gen products

Motor control with STM32

Ease STM32 adoption for motor control

Providing development platform: MC-SDK (firmware library + workbench), MC pilot, MC profiler, hardware boards, documentation.

Innovative products/peripherals and software algorithms

- Advanced motor control timer
- Rich and advanced analog peripherals embedded in the STM32
- Motor profiler
- STM32 ZeST and HSO / sensorless algorithms

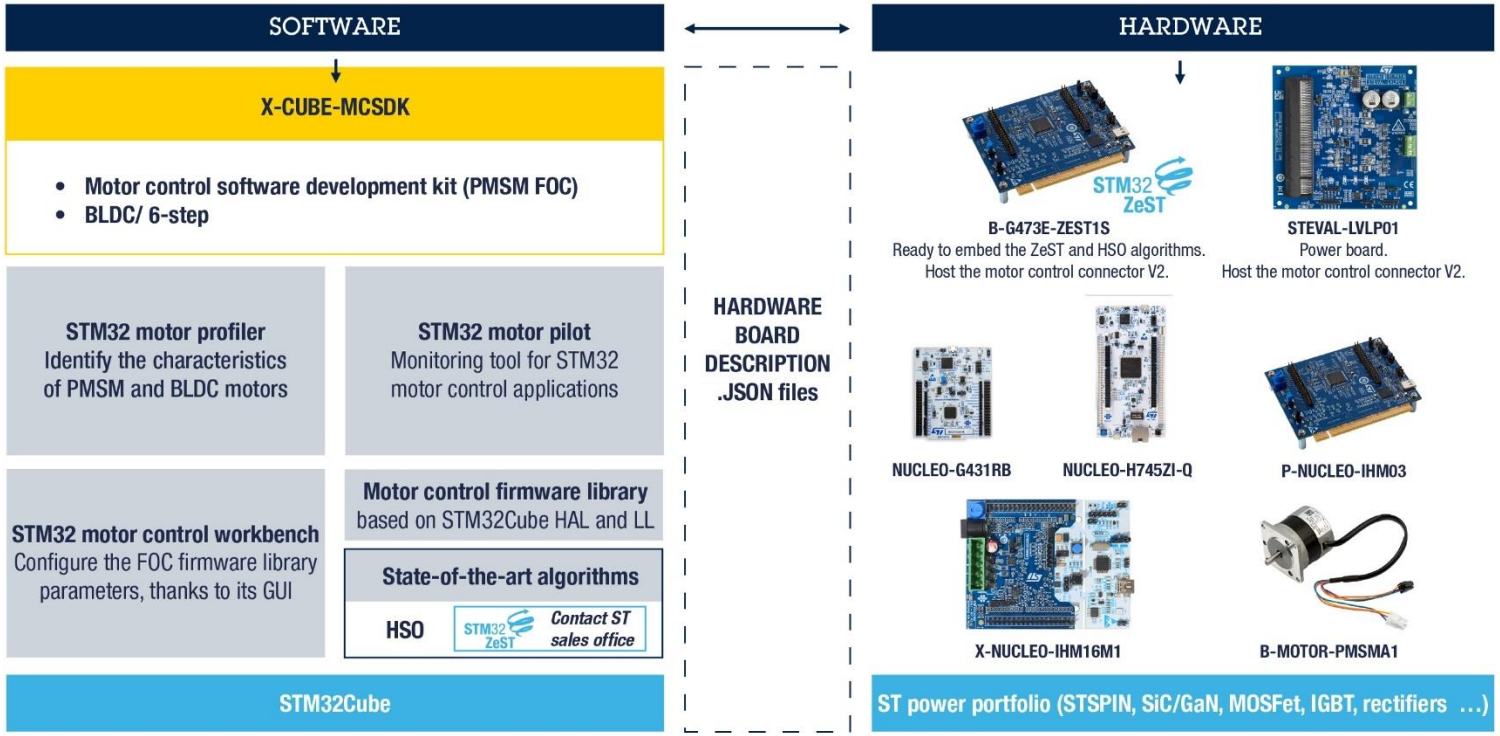
Leverage ST portfolio

Large choice of power components and STM32 to create end-to-end motor control solutions.

STM32 ZeST

Software algorithm providing full torque at zero speed for any kind of BLDC/PMSM motor in sensorless mode (in addition to the observer HSO algorithm)

LATEST NEWS



STM32 Ecosystem for motor control

Digital power with STM32

Ease STM32 adoption for digital power converters

Development platforms:
DP SDK (PFC and PSU topology examples generator, firmware lib), hardware boards, docs, development tools.

Innovative products/peripherals and software algorithms

- High-resolution timer supporting numerous digital power topologies
- Rich and advanced analog peripherals embedded in STM32
- Hardware coprocessor usage
- Biricha method implementation (ST Authorized Partner)

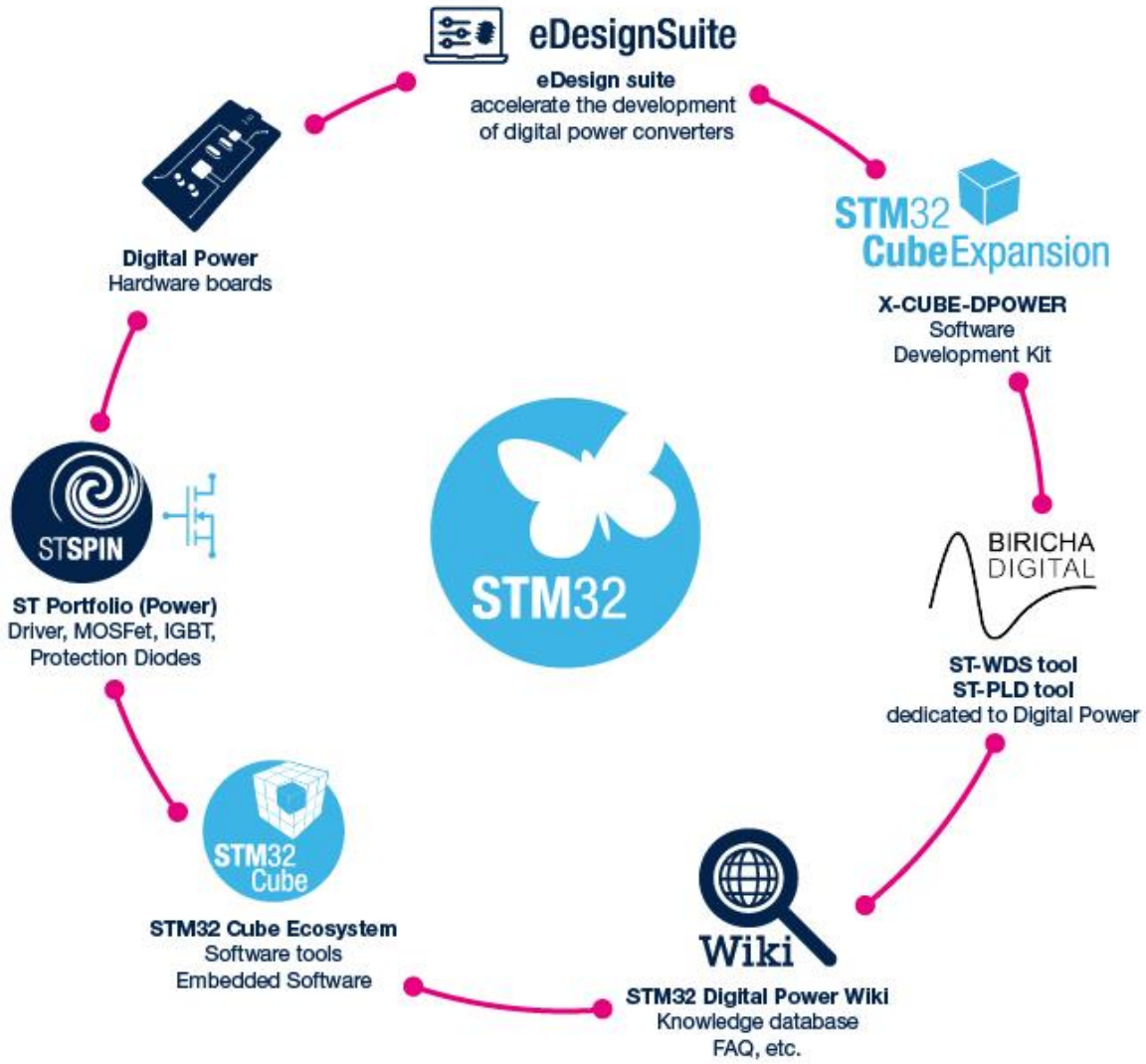
Leverage ST portfolio

Large choice of power components and STM32 to create end-to-end digital power solutions.

PFC and PSU within STM32CubeMX

Firmware pack importation with PFC and PSU topologies implementation in voltage or in current mode running on ST boards.

LATEST NEWS



STM32 for digital power

Saving time, cost, and reducing complexity with STM32

STM32 with USB Type-C® connector simplifies your design, eliminating the need for an external PD controller

Fast prototyping without coding

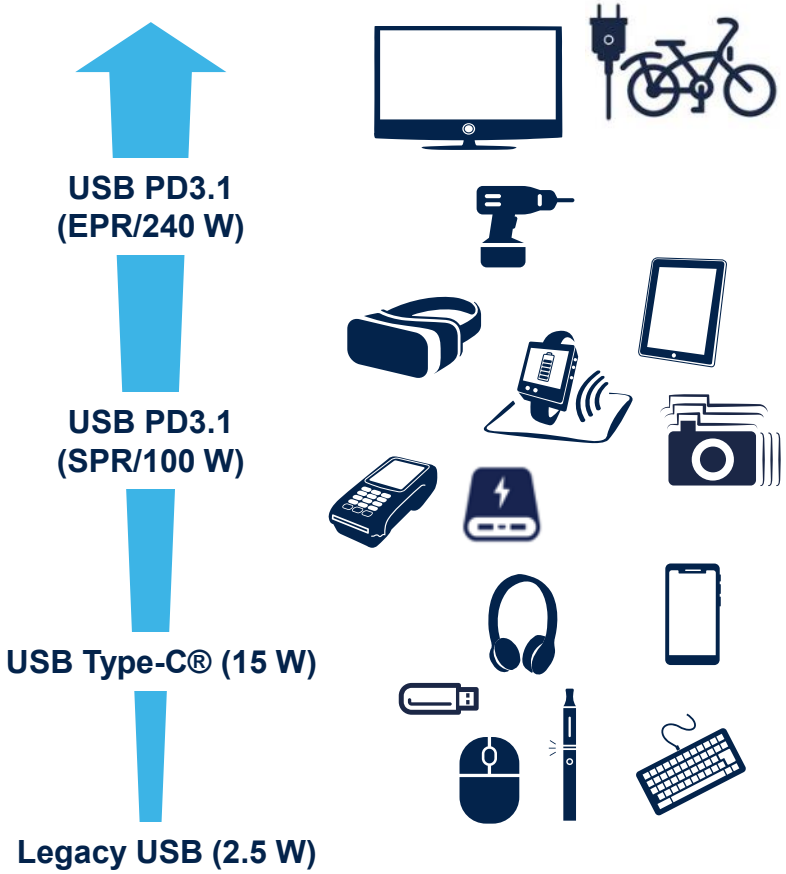
- Ready-to-use hardware and firmware examples
- Code generation for all USB Type-C® roles on STM32
- Easy debug with STM32CubeMonUCPD software tool

Optimize bill of material and safety

- CC logic, PD transceiver PHY, USB2 device/host interface
- Companion Type-C Port Protection devices (TCPP0x)

STM32 supports the latest USB Type-C® and PD3.1 standards

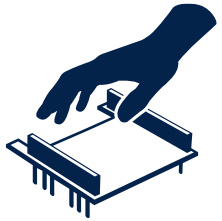
- SPR and EPR(*) power range up to 240 W, PPS ready. Sink, source, dual-role power, and data roles
- UCPD peripheral is USB-IF certified & supports connector management and USB PD r3.1 protocol (SPR, EPR*, PPS etc.)



(*) under development

Resources to move forward with your design

1+ million developers worldwide are using STM32.
Join them, share insights, and accelerate your design.


FIND INSIGHTS

- Visit the STM32 Community
- STM32 **MPU** Wiki
  STM32 **MCU** Wiki
- GitHub–STMicroelectronics
  GitHub–STM32 hotspot

LEARN & PRACTICE NEW SKILLS

- STM32 education
- STM32 **MCU** Developer Zone
  STM32 **MPU** Developer Zone
- Check out our events, workshops, & webinars

STAY UP TO DATE

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- STM32 YouTube channel
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Our technology starts with You

Find out more at www.st.com/STM32