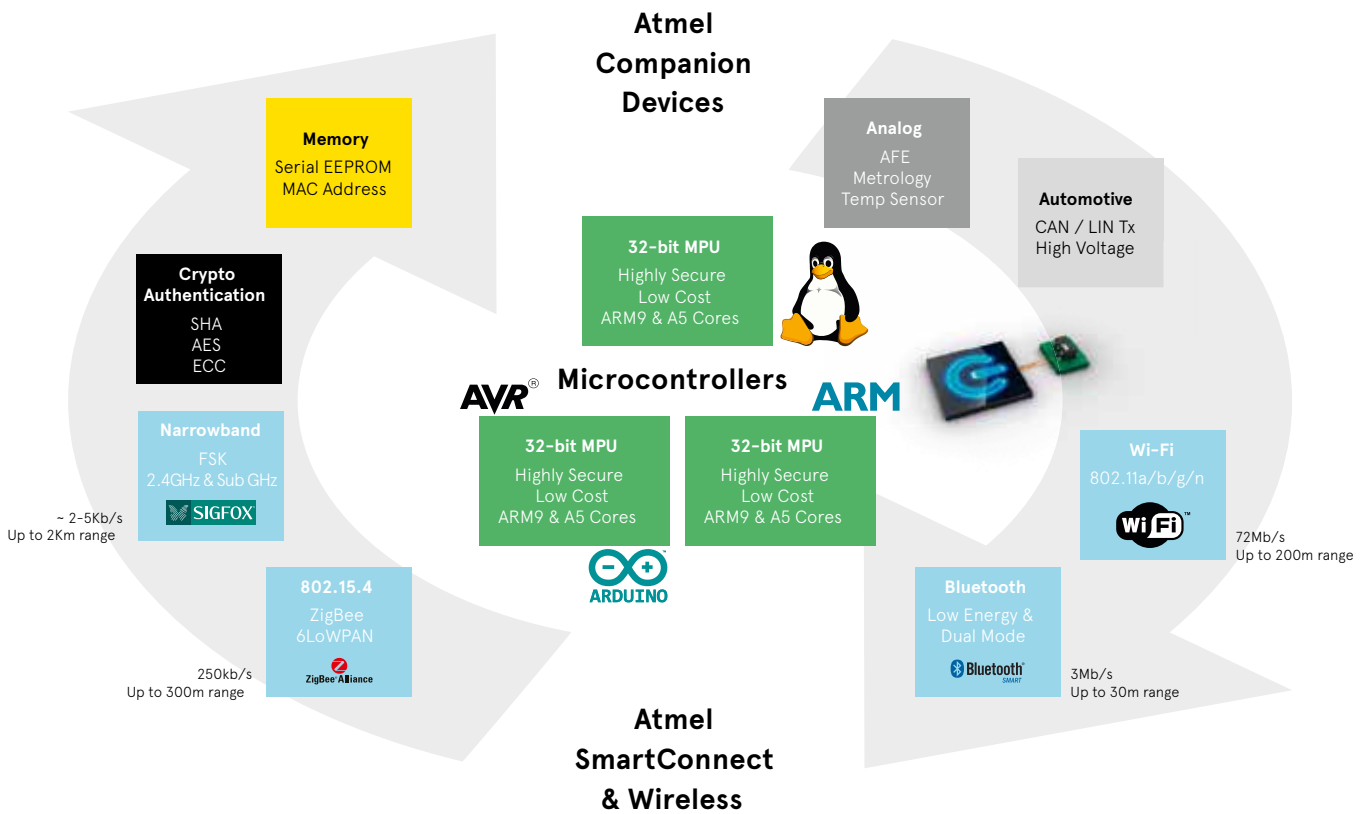


Focus technology and solutions

AVNET[®] SILICA

**TOGETHER WITH AVNET SILICA
A WINNING ALLIANCE**

Atmel & Microchip MCU's @ the Heart of the Connected World



	Embedded Control	Wireless /IoT	HMI /Touch	Security	Automotive
Focus Technology	8-Bit AVR 32-Bit ARM Cortex-M 32-Bit ARM Cortex-A	Zigbee (sub GHz, 2.4GHz) Wi-Fi (2.4GHz) BT Classic & BLE SigFox	32-Bit ARM9 32-Bit ARM Cortex-A PTC @ 32-Bit ARM devices & AVR	Crypto Authentication (symmetric / asymmetric) TPM	IVN (LIN, CAN) Car access & industrial RF 8-Bit AVR 32-Bit Cortex-M
Why Atmel?	<ul style="list-style-type: none"> Most efficient single-cycle 8-Bit CPU Ease-of-use with IDP (Atmel Studio 7, Atmel Start & Atmel Gallery) for AVR&ARM Large & scalable 8/32-Bit product portfolio Pico Power to enable <ul style="list-style-type: none"> Lowest static power 8-Bit (100nA@25°C) World's most efficient Cortex M0+ device (highest EEMBC score) with 35µA/MHz & <1µA with 40K SRAM retention Smart low power peripherals: Event system, SERCOM Sleepwalking, low-cost USB from internal RTC 	<p>Broadest offering for IoT Zigbee</p> <ul style="list-style-type: none"> Best RF performance & Ultra low power (sleep, TX off, RX listen) Highest data rate (2MBit/s), Best ESD & supports T=125°C <p>Wi-Fi & BT/BLE</p> <ul style="list-style-type: none"> MP certified (FCC, ETSI etc.) modules incl. stach Best RF performance Lowest Power (deep sleep < 3µA) Cloud-ready platform Industry's best security Supporting standards: OIC, Thread, home kit <p>SigFox</p> <ul style="list-style-type: none"> Single chip, 1st SigFox certified device 	<p>HMI:</p> <ul style="list-style-type: none"> Low Power: Run mode <150mW @536MHz) Small footprint (10x10) Open Source SW support on Linux, Android, freeRTOS Linux QT widget library for HMI <p>Touch:</p> <ul style="list-style-type: none"> HW for capacitive touch sensing (CPU utilization < 5%) Class B Safety Lib Low power Robustness (EMI, moisture) for home appliance touch 	<ul style="list-style-type: none"> Strong multi-level HW security e.g. active shield, memories protected) @ low cost Portfolio from low-cost symmetric AES encryption (SHA204) to sophisticated asymmetric ECC Easy-to-use tools (Xplained wings) and demo SW (ACES) available 	<ul style="list-style-type: none"> Industry's largest LIN portfolio (Tx & SBC) HV port for switches, relay & LED CAN: low power standby mode and CAN FD support Industrial RF – low current consumption TX/RX PTC for robust buttons & proximity 32-Bit MCU w Ethernet AVB stack for infotainment gateway

	Embedded Control	Wireless /IoT	HMI /Touch	Security	Automotive
Key Product	Tiny AVR, (X)Mega AVR SAMD/L SAMC (5V) SAM4S/N/L/G/E SAME70/S70 SAMA5	RF233,AtmegaRFR2 SAMR21 WINC1500 WINC3400SAMW25 BTLC1000, SAMB11 ATA8510/15/20	SAM9 G/CN SAMA5D3/4 SAMA5D2 w PTC SAMD1x/2x PTC SAML21 PTC SAMC20 PTC	SHA204 ECC108/508 TPM2.0 SAMA5D4/D2	ATA6632/3/4 (LIN) ATA656x (CAN-FD) SAMDA/CA SAMV70/1 ATA583x
Target Applications	<ul style="list-style-type: none"> Battery-powered general purpose Small appliance Board controller Sensor interfaces Lighting Industrial automation & M2M (process transmitter & Asset tracking) GPS watches Sensors, actuators Room control unit Networking & gateways 	<p>Zigbee: Connected Lighting & Smart Meter</p> <p>Wi-Fi, BLE & SigFox</p> <ul style="list-style-type: none"> Wearables, Appliance Healthcare Smart meter Thermostats Connected Lighting Industrial control Building automation HMI panels 	<ul style="list-style-type: none"> Wearables Control panels Imaging & terminals Industrial automation Audio streaming Robotics Home Appliance Room control unit Battery-powered automation panels, Automotive interior 	<ul style="list-style-type: none"> Consumables e.g. external batteries, cables Secure IoT application e.g. building automation, smart meter etc. Industrial automation networking Power tools 3D Printer Smart Meter & secure gateways 	<ul style="list-style-type: none"> Networking: Body module, door /seat control, window lifter RKE / PKE Interior HMI e.g. center stack, roof module, Battery-operated car access, door opener / passive entry, remote connections Industrial & construction 