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What is "[Embedded - Microcontrollers](#)"?

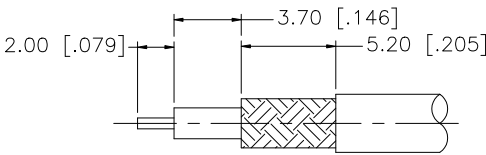
"[Embedded - Microcontrollers](#)" refer to small, integrated circuits designed to perform specific tasks within larger systems. These microcontrollers are essentially compact computers on a single chip, containing a processor core, memory, and programmable input/output peripherals. They are called "embedded" because they are embedded within electronic devices to control various functions, rather than serving as standalone computers. Microcontrollers are crucial in modern electronics, providing the intelligence and control needed for a wide range of applications.

Applications of "[Embedded - Microcontrollers](#)"

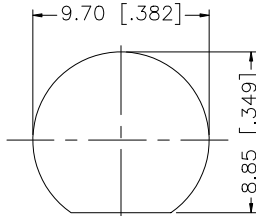
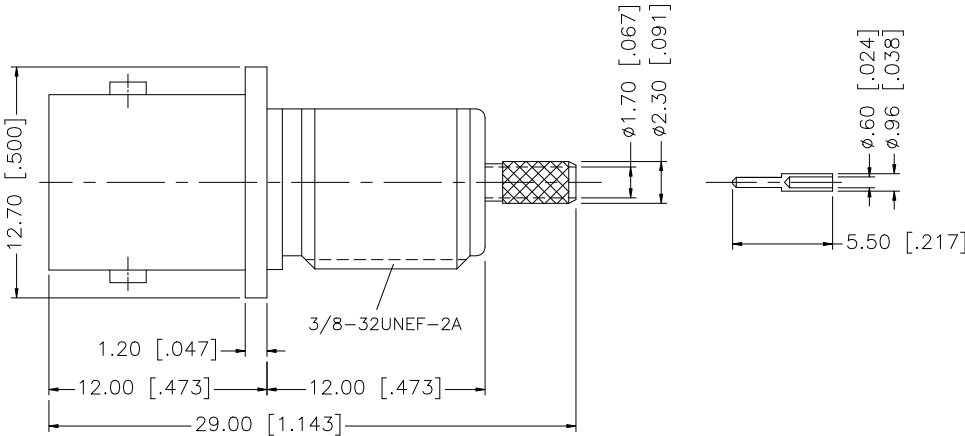
Details

| | |
|----------------------------|---|
| Product Status | Active |
| Core Processor | ARM® Cortex®-M4 |
| Core Size | 32-Bit Single-Core |
| Speed | 48MHz |
| Connectivity | I ² C, IrDA, LINbus, SPI, UART/USART, USB |
| Peripherals | Brown-out Detect/Reset, DMA, I ² S, POR, PWM, WDT |
| Number of I/O | 48 |
| Program Memory Size | 128KB (128K x 8) |
| Program Memory Type | FLASH |
| EEPROM Size | - |
| RAM Size | 32K x 8 |
| Voltage - Supply (Vcc/Vdd) | 1.68V ~ 3.6V |
| Data Converters | A/D 7x12b; D/A 1x10b |
| Oscillator Type | Internal |
| Operating Temperature | -40°C ~ 85°C (TA) |
| Mounting Type | Surface Mount |
| Package / Case | 64-VFQFN Exposed Pad |
| Supplier Device Package | 64-QFN (9x9) |
| Purchase URL | https://www.e-xfl.com/product-detail/microchip-technology/atsam4ls2ba-mur |

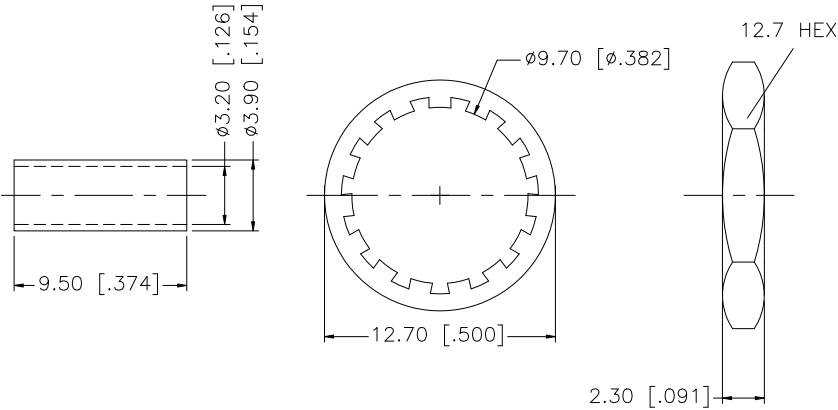
| REV. | DATE | DESCRIPTION |
|------|----------|--|
| A | 07/11/00 | REVISE CRIMP NOTE |
| B | 07/31/02 | REVISE CRIMP NOTE |
| C | 08/09/05 | REVISE CABLE DESCRIPTION TO 179/U |
| D | 01/28/08 | REMOVE REFERENCE TO SPECIFIC CRIMP TOOL MANUFACTURE IN NOTES |



RECOMMENDED CABLE
STRIPPING DIMENSIONS



RECOMMENDED
MOUNTING HOLE



NOTE:
1- USE .128" HEX CRIMP DIE SET
TO TERMINATE OUTER FERRULE

| | | | | | | | | | | | | | | | |
|---|-------------|-------------|---------|-----|--|-----------|--------|----------|--|---|--|--------------------|--|--|--|
| 8 | | | | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS. DIMENSIONS IN [] ARE IN INCHES AND FOR CUSTOMER REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED TOLERANCES FOR MILLIMETERS ARE: 0.5 – 8mm ± 0.20mm 8 – 30mm ± 0.40mm 30 – 120mm ± 0.50mm UNLESS OTHERWISE SPECIFIED TOLERANCES FOR INCHES ARE: .020 – .315 = ± 0.007” .315 – 1.180 = ± 0.015” 1.180 – 4.724 = ± 0.020” | APPROVALS | | DATE | | <h1>Amphenol Connex</h1> | | | | | |
| 7 | | | | | | DRAWN | G.R.S. | 01/28/08 | | | | | | | |
| 6 | HEX NUT | BRASS | NICKEL | 1 | | CHECKED | | | | | | | | | PART DESCRIPTION BNC BULKHEAD CRIMP JACK (front mount) (FOR 179/U 75ohm CABLE) |
| 5 | LOCK WASHER | BRASS | NICKEL | 1 | | ISSUED | | | | | | | | | |
| 4 | FERRULE | BRASS | NICKEL | 1 | | SHEET | 1 OF 1 | | | | | PART NO. 112654 | | | |
| 3 | CONTACT PIN | BER. COPPER | GOLD | 1 | CAD FILE C:/112/112654.DWG | | | | | DWG. NO. 112654.DWG REV. D SIZE A SCALE NA | | | | | |
| 2 | INSULATOR | TEFLON | NATURAL | 1 | DO NOT SCALE DRAWING | | | | | | | | | | |
| 1 | BODY | BRASS | NICKEL | 1 | | | | | | | | | | | |
| | DESCRIPTION | MATERIAL | FINISH | QTY | | | | | | | | | | | |