# STM32F103R8H7

| | |
|---|---|
| Manufacturer Part Number | STM32F103R8H7 |
| Manufacturer | STMicroelectronics |
| Allelco Part Number | 32D-STM32F103R8H7 |
| ECAD Model | PCB Symbol, Footprint & 3D Mode |
| Parts Description | IC MCU 32BIT 64KB FLASH 64TFBGA |
| Package | 64-TFBGA |
| Data sheet | STM32F103x(8,B) Datasheet.pdf |
| RoHS Status | ROHS3 Compliant |

Image may be representation.
See specifications for product details.

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STM32F103R8H7 - STMicroelectronics.New Original in Stock. Download Linear Technology STM32F103R8H7 datasheet/specifications on AllelcoElec.com.
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## Specifications

STM32F103R8H7 Tech Specifications
STM32F103R8H7 - STMicroelectronics technical specifications, attributes, parameters

| Product Attribute | Attribute Value | Product Attribute | Attribute Value |
|---|---|---|---|
| Manufacturer | STMicroelectronics | Oscillator Type | Internal |
| Voltage - Supply (Vcc/Vdd) | 2V ~ 3.6V | Operating Temperature | -40°C ~ 105°C (TA) |
| Supplier Device Package | 64-TFBGA (5x5) | Number of I/O | 51 |
| Speed | 72MHz | Mounting Type | Surface Mount |
| Series | STM32F1 | EEPROM Size | - |
| RAM Size | 20K x 8 | Data Converters | A/D 16x12b |
| Program Memory Type | FLASH | Core Size | 32-Bit Single-Core |
| Program Memory Size | 64KB (64K x 8) | Core Processor | ARM® Cortex®-M3 |
| Peripherals | DMA, Motor Control PWM, PDR, POR, PVD, PWM, Temp Sensor, WDT | Connectivity | CANbus, I²C, IrDA, LINbus, SPI, UART/USART, USB |
| Package / Case | 64-TFBGA | Base Product Number | STM32F103 |
| Package | Tray | | |

## Parts with Similar Specifications

The three parts on the right have similar specifications to STMicroelectronics STM32F103R8H7

| Product Attribute | | | | |
|---|---|---|---|---|
| Part Number | STM32F103R8H7 | STM32F103RBH7 | STM32F103RBH6TR | STM32F103R4H6A |
| Manufacturer | STMicroelectronics | STMicroelectronics | STMicroelectronics | STMicroelectronics |
| Operating Temperature | -40°C ~ 105°C (TA) | -40°C ~ 105°C (TA) | -40°C ~ 85°C (TA) | -40°C ~ 85°C (TA) |
| Base Product Number | STM32F103 | STM32F103 | STM32F103 | STM32F103 |
| Supplier Device Package | 64-TFBGA (5x5) | 64-TFBGA (5x5) | 64-TFBGA (5x5) | 64-TFBGA (5x5) |
| Peripherals | DMA, Motor Control PWM, PDR, POR, PVD, PWM, Temp Sensor, WDT | DMA, Motor Control PWM, PDR, POR, PVD, PWM, Temp Sensor, WDT | DMA, Motor Control PWM, PDR, POR, PVD, PWM, Temp Sensor, WDT | DMA, Motor Control PWM, PDR, POR, PVD, PWM, Temp Sensor, WDT |
| EEPROM Size | - | - | - | - |
| Program Memory Size | 64KB (64K x 8) | 128KB (128K x 8) | 128KB (128K x 8) | 16KB (16K x 8) |
| Speed | 72MHz | 72MHz | 72MHz | 72MHz |
| Core Size | 32-Bit Single-Core | 32-Bit Single-Core | 32-Bit Single-Core | 32-Bit Single-Core |
| Series | STM32F1 | STM32F1 | STM32F1 | STM32F1 |
| Voltage - Supply (Vcc/Vdd) | 2V ~ 3.6V | 2V ~ 3.6V | 2V ~ 3.6V | 2V ~ 3.6V |
| Oscillator Type | Internal | Internal | Internal | Internal |
| Program Memory Type | FLASH | FLASH | FLASH | FLASH |
| Package | Tray | Tray | Tape & Reel (TR) | Tray |
| Mounting Type | Surface Mount | Surface Mount | Surface Mount | Surface Mount |
| Connectivity | CANbus, I²C, IrDA, LINbus, SPI, UART/USART, USB | CANbus, I²C, IrDA, LINbus, SPI, UART/USART, USB | CANbus, I²C, IrDA, LINbus, SPI, UART/USART, USB | CANbus, I²C, IrDA, LINbus, SPI, UART/USART, USB |
| RAM Size | 20K x 8 | 20K x 8 | 20K x 8 | 6K x 8 |
| Package / Case | 64-TFBGA | 64-TFBGA | 64-TFBGA | 64-TFBGA |
| Core Processor | ARM® Cortex®-M3 | ARM® Cortex®-M3 | ARM® Cortex®-M3 | ARM® Cortex®-M3 |
| Data Converters | A/D 16x12b | A/D 16x12b | A/D 16x12b | A/D 16x12b |
| Number of I/O | 51 | 51 | 51 | 51 |

## STM32F103R8H7 Datasheet PDF

Download STM32F103R8H7 pdf datasheets and STMicroelectronics documentation for STM32F103R8H7 - STMicroelectronics.
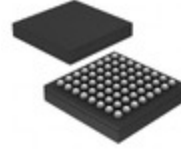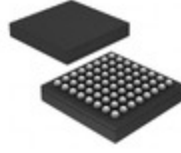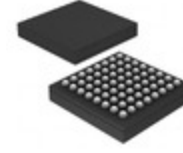
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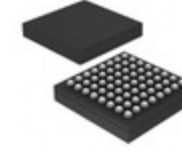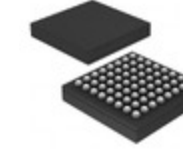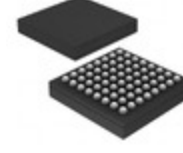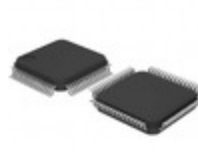
STM32F103x(8,B) Datasheet.pdf

### PCN Packaging

**PCN Assembly/Origin**

## ■ Customers Also Interested in

### Recommended Products

| | | |
|---|---|---|
| **STM32F103RBH7**<br>STMicroelectronics<br>IC MCU 32BIT 128KB FLASH 64BGA | **STM32F103R4T6**<br>STMicroelectronics | **STM32F103RBH6TR**<br>STMicroelectronics<br>IC MCU 32BIT 128KB FLASH 64TFBGA |
| **STM32F103R4H6A**<br>STMicroelectronics<br>IC MCU 32BIT 16KB FLASH 64BGA | **STM32F103R8H6TR**<br>STMicroelectronics<br>IC MCU 32BIT 64KB FLASH 64TFBGA | **STM32F103R8H6**<br>STMicroelectronics<br>IC MCU 32BIT 64KB FLASH 64BGA |
| **STM32F103RBT6**<br>STMicroelectronics<br>IC MCU 32BIT 128KB FLASH 64LQFP | **STM32F103R8T6**<br>STMicroelectronics<br>IC MCU 32BIT 64KB FLASH 64LQFP | **STM32F103R6T6**<br>STMicroelectronics<br>IC MCU 32BIT 32KB FLASH 64LQFP |
| **STM32F103RBH6**<br>STMicroelectronics<br>IC MCU 32BIT 128KB FLASH 64BGA | **STM32F103R8T7**<br>STMicroelectronics<br>IC MCU 32BIT 64KB FLASH 64LQFP | **STM32F103R8T6,32**<br>STMicroelectronics |
| **STM32F103R6T6ATR**<br>STMicroelectronics<br>IC MCU 32BIT 32KB FLASH 64LQFP | **STM32F103R8T6TR**<br>STMicroelectronics<br>IC MCU 32BIT 64KB FLASH 64LQFP | **STM32F103R4H6**<br>STMicroelectronics |
| **STM32F103R6T6A**<br>STMicroelectronics<br>IC MCU 32BIT 32KB FLASH 64LQFP | **STM32F103R6T7A**<br>STMicroelectronics<br>IC MCU 32BIT 32KB FLASH 64LQFP | **STM32F103R8H6,32**<br>STMicroelectronics |

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**Delivery Cost**

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> Use our account for the shipment. Refer to the table below for the approximate charges.

(Different time frame / countries / package size has different price.)

**Delivery Method**

> Global Common Shipment by DHL / UPS / FedEx / TNT / EMS / SF we support.

> Others more shipping ways, please get in touch with your customer manager.

| Common Countries Logistic Time Reference | | |
|---|---|---|
| **Region** | **Country** | **Logistic Time(Day)** |
| America | United States | 5 |
| | Brazil | 7 |
| Europe | Germany | 5 |
| | United Kingdom | 4 |
| | Italy | 5 |
| Oceania | Australia | 6 |
| | New Zealand | 7 |
| Asia | India | 6 |
| | Japan | 7 |
| Middle East | Israel | 6 |

| DHL & FedEx Shipment Charges Reference | |
|---|---|
| **Shipment charges(KG)** | **Reference DHL(USD$)** |
| 0.00kg-1.00kg | USD$60.00 |
| 1.00kg-2.00kg | USD$70.00 |
| 2.00kg-3.00kg | USD$80.00 |

Note: The above table is for reference only. There may have some data bias for the uncontrollable factors.

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