

**UPD78F1023GA-HAA-AX Information**


For Reference Only

**Part Number** [UPD78F1023GA-HAA-AX](#)  
**Manufacturer** Renesas Electronics America  
**Category** Integrated Circuits (ICs)  
[Embedded - Microcontrollers](#)  
**Description** IC MCU 16BIT 96KB FLASH 48TQFP  
**Package** 48-LQFP  
 For the pricing/inventory/lead time, please contact us  
 Website: <https://www.heisener.com>  
 E-mail: [salesdept@heisener.com](mailto:salesdept@heisener.com)


[Request a Quote](#)
**Certified Quality**

Heisener's commitment to quality has shaped our processes for sourcing, testing, shipping, and every step in between. This foundation underlies each component we sell.


**UPD78F1023GA-HAA-AX Specifications**

Manufacturer Part Number	<a href="#">UPD78F1023GA-HAA-AX</a>
Manufacturer	Renesas Electronics America
Category	Integrated Circuits (ICs) <a href="#">Embedded - Microcontrollers</a>
Package	48-LQFP
Series	78K0R/Kx3-L (USB)
Core Processor	78K/0R
Core Size	16-Bit
Speed	20MHz
Connectivity	CSI, I2C, LIN, UART/USART, USB
Peripherals	DMA, LVD, POR, PWM, WDT
Number of I/O	30
Program Memory Size	96KB (96K x 8)
Program Memory Type	FLASH
EEPROM Size	-
RAM Size	8K x 8
Voltage - Supply (Vcc/Vdd)	1.8 V ~ 3.6 V
Data Converters	A/D 8x10b
Oscillator Type	Internal
Operating Temperature	-40°C ~ 85°C (TA)
Mounting Type	-
Package / Case	48-LQFP
Supplier Device Package	-

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## UPD78F1023GA-HAA-AX Guarantees



### Quality Guarantees

We provide 90 days warranty. \*

If the items you received were not in perfect quality, we would be responsible for your refund or replacement, but the items must be returned in their original condition.



### Service Guarantees

We guarantee 100% customer satisfaction.

Our experienced sales team and tech support team back our services to satisfy all our customers.

## UPD78F1023GA-HAA-AX Payment Methods



## UPD78F1023GA-HAA-AX Shipping Methods



If you have any question about UPD78F1023GA-HAA-AX, please do not hesitate to contact us!

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E-mail: [salesdept@heisener.com](mailto:salesdept@heisener.com)