

Small to Middle Capacity Device Programmer

AF9724 / 25 / 11

Quick & Flexible

For programming of small to middle capacity NOR/NAND Flash, serial Flash, and Flash microcontrollers

Mass Production Device Programmer



High speed data transfer

USB2.0 interface for high speed transfer and remote control realizes faster transfer of high density data.

1 Gbit binary data transfer: approx. 20 sec

Full pin checking

Checks whether all pins of devices on adapters correctly contact before programming. Loose connections due to deteriorated terminals, device mounting failure, and short circuits between terminals are detected, improving programming efficiency and reliability. * Some devices not supported.

High speed programming

High speed programming/reading with the R/W cycle of up to 80nsec, 10 times faster than AF9845, and maximum 16bit data bus access.

Engineering Device Programmer



USB 2.0 host function

Connectable with commercially available USB Flash memories, enabling downloading of master and algorithm data without PCs.



Automatic recognition & concurrent operation

A concurrent function is incorporated to begin automatic processing when the device mounting is detected, largely reducing the cycle time.

* Only when 2 slots are used. Not installed in AF9711.

Processing time examples (NOR Flash 256 Mbit) (sec)

Programmer	Program	B.P.V
AF9724 / 25 / 11	75	85
Previous models(AF9723B + AF9845B/C)	175	270

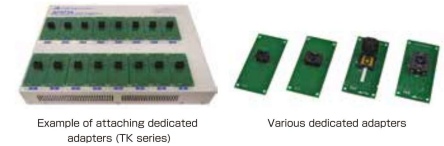
High speed programming to SPI Flash memories

Dedicated adapters enables high speed programming without disturbing device capabilities. Support single, dual, and quad modes.

Programming time examples(W25Q64FVSSIG 64Mbit) (sec)

Models used	Program
AF9724+AF9851A+TEF005-SIR8SPI-200	100
AF9724+TK001-SPI8SOP-200	18

* The programming time depends on devices and environments.

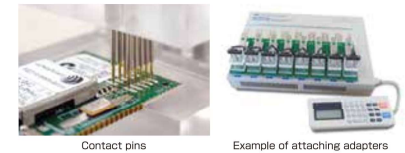


Examples of customization

Programming tools for wireless modules

For wireless modules, which are increasing due to IoT, we offer clip-type programming tools with pins that vertically descend and correctly contact with module terminals.

Connecters are not needed on circuit boards, which reduces component cost, work processes, and board size.



We can produce various custom tools

Tests

We can establish various test systems to ensure reliability of programming quality.



Product specifications

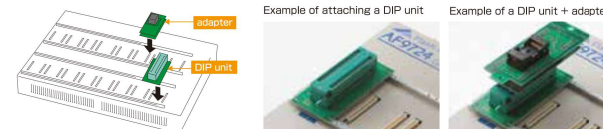
	AF9724	AF9725	AF9711
Supported devices	Up to 1 Gbit 1.8 to 5V Flash memories, Flash microcontrollers, and other memories		
Speed	R/W cycle of up to 80 nsec		
Buffer memory	1 Gbit as a standard (expandable to 16Gbit as an option)		
Concurrent programming	16 devices	8 devices	1 device
No. of slots	16 slots	8 slots	1 slot
Device functions	COPY · ERASE · BLANK · PROGRAM · VERIFY · B.P.V · E.P.V · E.P · P.V		
Programming power(Vcc)	1.2V to 6.5V (IccMax=500mA / 2 sockets)		1.2V to 6.5V (IccMax=250mA)
External interfaces	USB2.0 and USB host function		
Data bus	Up to 16bit		
Monitor display	20 characters×4 rows, LCD		20 characters×4 rows, LCD(option)
Input voltage/frequency	AC100 to 240V / 50 to 60Hz		
Power consumption	Up to 200VA		
Size * excluding protrusions	W465×D330×H67mm		W135×D180×H50mm
Weight * excluding accessories	Approx. 6kg	Approx. 5.9kg	Approx. 0.7kg
Other	Compliant with RoHS		

DIP conversion units enabling use of previous conversion adapters

Conversion adapters for previous models can be used with dedicated DIP units (a paid option), which enables efficient use of your equipment. (Some adapters are not supported)

Model name	Supported adapters	Names of previous models
48DIP Unit AF9851A	48 pin DIP Adapter	AF9845 series, AF9708/09 series, AF9710
40DIP Unit AF9852A	40 pin DIP Adapter	AF9837
32DIP Unit AF9853B	32 pin DIP Adapter	AF9833, AF9708/09 series

* In some cases, algorithm software needs to be adjusted. (free)



Conversion adapter

Package Conversion Adapter

As compact, high-density, and complexed Flash memories rapidly increased, packages tailored to application specifications have been popular.

A wide variety of packages includes custom DIMM for each customer and many types of cards.

We offer conversion adapters for programmers that support memories of various semiconductor manufacturers.

