

For Inquiries regarding All Products**■Supported Devices**

Please see the device list on our website or use the device search to check devices supported by our programmer series. We are continuously adding new devices. For inquiries about devices that are not included in the list, contact us by using the contact form on our website or contact information below.

■Custom Support

We can respond to various requirements of customers relating to original memory boards, modules, special packages, in-circuit programming, etc. Please contact us by using the contact form on our website or contact information below.

■Free Upgrade

Once you complete the user registration on our website, you can download the latest algorithm software for free and receive important product information.

* Offline versions, such as CD-ROM, are paid options.

<Contact Us> E-mail

Technical questions : support@j-fsg.co.jp

Inquiries about sales : sales@j-fsg.co.jp

<Contact Us> TEL, FAX

TEL.+81-53-459-1050 / FAX.+81-53-455-6020



TOA ELECTRONICS, Inc.
Flash Support Group Company

23F Hamamatsu Act Tower, 111-2 Itaya-machi, Naka-ku,
Hamamatsu, Shizuoka, 430-7723, Japan

TEL +81-53-459-1050 FAX +81-53-455-6020

URL <http://www.j-fsg.co.jp/en/>

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2020.01.20

Quick & Flexible

Device Programmer Series & Service



Quick & Flexible

Quickly and flexibly responding to your requirements and changes in the market, we will properly support your business.

High speed programming for high density memories is now required to respond to greater capacities of semiconductor memories, such as NAND Flash memories, expansion of application, and shortened product development cycles.

The semiconductor memory market, with more compact and higher density memories, has unlimited possibilities including great technological progress.

In the market of semiconductor memory tools, mainly for Flash memories and Flash microcontrollers, our company are offering device programmers/automated programming systems, developing and supplying peripheral devices, and providing high-quality programming service using our product.

Corporate Profile

TOA ELECTRONICS, Inc.
Flash Support Group Company

Domestic

Head office



119-2 Azamishinden, Odaka-cho, Midori-ku, Nagoya, Aichi, 459-8001, Japan

Programming Center



9162-1, Miyakoda-cho, Kita-ku, Hamamatsu, Shizuoka, 431-2102, Japan
TEL.+81-53-428-8383
FAX.+81-53-428-8377

Nagoya Representative Office

119-2 Azamishinden, Odaka-cho, Midori-ku, Nagoya, Aichi, 459-8001, Japan

Company Head office



23F Hamamatsu Act Tower, 111-2 Itaya-machi, Naka-ku, Hamamatsu, Shizuoka, 430-7723, Japan
TEL.+81-53-459-1050
FAX.+81-53-455-6020

Tokyo Sales Branch



4F Oshima Bldg., 2-4-8 Konan, Minato-ku, Tokyo, 108-0075, Japan
TEL.+81-3-5769-2950
FAX.+81-3-5769-2951

Osaka Sales Branch

4F Nissay Shin-Osaka South Bldg., 5-14-5 Nishinakajima, Yodogawa-ku, Osaka, 532-0011, Japan

Overseas

Chinese Subsidiary Shanghai TOA FSG Technology Co., Ltd.



1F, No.D4, No.3802 Shengang RD, Songjiang Industrial Zone, Shanghai, 201611, P.R. China
TEL.+86-21-5761-8122
FAX.+86-21-5761-5723

TOA SE, Inc.



100 Capital Court, Nicholasville, Kentucky, 40356, U.S.A.
TEL.+1-859-881-3330
FAX.+1-859-881-3336

South China office

3F, Bldg1., bei science and technology industrial park, hetianxia intersection, shijie town, dongguan city, hirodong province.523290,P.R. China
TEL.+86-21-5761-8122
FAX.+86-21-5761-5723

TOA SE(Thailand)Co., Ltd



〒10110 Rampo Business Center, 115 Rimtangrodfaisaipaknam Road, Klongtoey, Klongtoey, Bangkok, Thailand
TEL.+66-2-671-3015
FAX.+66-2-671-2130

Founded	May 24, 1956
Capital	JPY 100 million
Chairman	Makoto Tanaka
President&CEO	Takanori Tanaka
Scope of Business	<ul style="list-style-type: none"> ● Planning, manufacturing, sales, and servicing of device programmers and accessories ● Planning, manufacturing, sales, and servicing of applied microcomputer products ● Business relating to the items described above, such as programming services for device
Total employees	220 (including 50 Flash Support Group employees)
Customers	Panasonic Industrial Devices Systems and Technology Co., Ltd. / Fujitsu Devices Inc. / Renesas Electronics Corporation / Toshiba Corporation / Micron Japan Ltd. / Lapis Semiconductor Co., Ltd. / Macronix (Asia) Limited Japan Branch / Cypress Semiconductor/ and others(not listed in order)

INDEX

Device Programmer for eMMC Devices

AF9750

High speed programming with DDR200MHz

P.04

Large-Capacity Device Programmer

AG9730B/30C/31, AG9740/40S

Large-capacity buffer memory High speed programming High-speed data downloading

P.06

Small to Medium-Capacity Device Programmer

AF9724/25/11

High-performance standard programmers satisfying engineering and production needs

P.08

Conversion adapter

P.09

In-Circuit Programmer

AF9201

Compact, affordable in-circuit programmer with wide device support
Customization for mass production available

P.10

Automated Programming System

Energy saving systems for mass production
Supporting small- to large-capacity memories and various packages

P.12

Programming Service

Quick and high quality service for both high-mix low-volume and mass productions with our own facility

P.14

Contact us if you need customization of specifications, or programming systems in foreign countries.

Device Programmer for eMMC Devices

AF9750

Quick & Flexible

Offers high speed processing using 200MHzDDR interface, for ver 5.0 or newer eMMC devices

New AF9750

High speed programming

For ver. 5.0 or newer eMMCs meeting JEDEC HS400, AF9750 with 200MHzDDR interface offers about 4 times faster programming than previous models.

64GB (P+V) | Approx. 1,330 sec Approx. 21 sec/GB

* Depends on devices.

Data transfer

High speed transfer of high density data is possible by using USB3.0.

1GB data transfer (PC→AF9750) | Approx. 11 sec

* Depends on PC specifications. The transfer time includes the checksum processing time.



Application for eMMC devices



AF9750 is provided with control software using UI specialized for programming eMMC devices. The latest software for updating hardware and device information will be provided for free on our website.

- USER area can be split into four parts with GPP function
- "Enhanced" configuration can be applied
- Various register settings are supported
- Programming settings can be saved and read as a project file
- Quantity control by using the lot mode

Interfaces appropriate for manufacturing sites

Equipped with USB 2.0/3.0, LAN and RS232C, AF9750 can be linked with other production equipment and control devices.



* Please contact us for use of LAN, RS232C.

Embedding AF9750 in an automated system

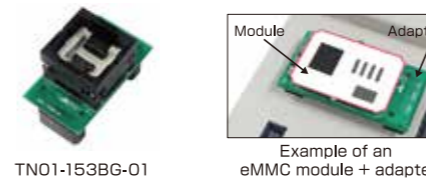
Long-hour unmanned programming can be performed by embedding AF9750 in an automated system. Image processing using a camera for device position correction enables device transportation with no stress on device balls. We can also offer systems with laser marking and 3D lead inspection functions.



Options

● Conversion adapter

Our conversion adapters support eMMC packages of various manufacturers. We can also produce custom adapters for programming to eMMCs that have already embedded.



Model	Package
TN01-153BG-01	153BGA 11.5×13×0.8 ~ 1.2 (mm)
TN01-100BG-02	100BGA 14×18×1.2 ~ 1.4 (mm)

● Socket open/ close jig

As lead-free memories with larger capacities become widespread, many sockets have been tight and hard to open/close. Socket open/close jig will reduce burden on workers and increase operation efficiency.

- Simultaneous open/ close of 4 sockets by air cylinder
- Safety design by both-handed operation
- Compatible with various adapters by exchanging spacers



* Depending on the shape of the socket, the open/ close stay may need to be replaced.

Requests for machine demonstrations and inquiries

MAIL : AF9750@j-fsg.co.jp

Product specifications

	AF9750
Supported devices	Ver. 5.0 or newer eMMC devices of various manufacturers
Buffer memory	1Tbit (128GB) as a standard, optional expansion available
Concurrent programming/No. of slots	Up to 20 devices / 20 slots
Device functions	COPY · ERASE · BLANK · PROGRAM · VERIFY · B.P.V · E.P.V · P.V
Programming power	Vcc: +3.3V, Max: 1A/slot Vccq: +1.8V, Max: 500mA/slot
External interfaces	USB 2.0/3.0, RS232C, LAN
Input power voltage	AC100 to 240V
Frequency range	50 to 60Hz
Power consumption	Up to 300VA
Size/weight	W223 x D290 x H108mm (excluding protrusions)/approx. 3.5kg
Consideration for environment	Compliant with RoHS

Large-Capacity Device Programmer

AG9730B/30C/31
AG9740/40S

Quick & Flexible

Realizes high speed programming for large capacity memories in both engineering and mass production

High-Speed Gang Programmer

AG9730B/30C/31

For high density Flash and SPI Flash memories

AG9730B Amusement

- High power with Vcc max. 2A per slot
- Supports 2-socket adapters for 140/144pin LGA, etc.
- Data download approx. 15 sec/Gbit

Standard buffer memory
256 Gbit
devices
Max. **16**



AG9730C General

- Supports eMMC/NAND/SPI Flash, etc. for consumer products
- Large capacity buffer memory 256Gbit
- Quick memory deletion by specifying addresses

Standard buffer memory
256 Gbit
devices
Max. **16**



Concurrent programming of up to 16 devices

For devices such as SPI Flash, eMMC NAND memories (moviNAND, iNAND), NOR56TSOP, NAND48TSOP, concurrent programming of up to 16 pcs can be performed with 4-socket adapters.

Enable master data download via a CF card

Even without using a personal computer, master data can be downloaded by using a commercially available CF card (*).

* Supported formats of CF cards are FAT12, FAT16, and FAT32.

Full pin checking

By detecting defective items before programming, AG9730B/C maintains high production efficiency and offers high quality programming.

4-slot concurrent and independent operations

Concurrent programming of 4 kinds of data (*1) and connecting 4 types of adapters (*2) are possible.

*1 Only when processing 1 type of adapter and device
*2 Programming is performed by each slot. Concurrent operation cannot be performed.

High speed processing

Newly developed high speed algorithm shortens the programming time for large capacity Flash memories.

Data transfer (PC→AG9730B/30C)	Approx. 15 sec/Gbit	Programming	AG9730B 64Gbit NOR Flash	Approx. 19 sec/Gbit (high speed algorithm ver.)
			AG9730C 64Mbit SPI Flash	Approx. 0.35 sec/Mbit

Max. 64 devices with 16 slots for mass production

AG9731 Amusement

- High power with Vcc Max. 2A per slot
- Concurrent programming of up to 64 devices with 4-socket adapters
- Concurrent programming of up to 32 pcs of 140LGA multipin devices
- Optionally, expandable to up to 256Gbit. (option)

Expansion to 256Gbit enables high speed downloading of approx. 18 sec/Gbit.

Standard buffer memory
64 Gbit
devices
Max. **64**



For high-speed serial interface

GANG Programmer

AG9740/40S

For high speed programming to high-speed serial interface memory modules in mass production

AG9740 Amusement

- Enables concurrent programming of up to 20 pcs*
* Depends on devices.
- High throughput programming at approx. 3.2sec/Gbit*
* When 20 62Gbit modules of company A are installed. Depends on devices.
- High speed downloading at approx. 2.2sec/Gbit* with USB3.0
* Depends on PC specifications.
- Buffer memory 512Gbit

Standard buffer memory
512 Gbit
devices
Max. **20**



AG9740S Amusement

- 4-slot version of AG9740
- Higher programming speed than AG9740 by approx. 20%
- Downloading/programming multiple master data sets at once
- Eliminating the control unit enables the low price

Standard buffer memory
512 Gbit
devices
Max. **4**



Product specifications

	Gang programmer			
	AG9730B/30C	AG9731	AG9740	AG9740S
Supported devices	256Mbit or greater 1.8 to 3.3V type Flash memories or equivalents Customization for various memories/media with ATA-compliant interfaces including HDD/SSD memory modules		High-speed serial interface memory modules	
Buffer memory	256Gbit	64Gbit (Expandable to 256Gbit as an option)	512Gbit	
Concurrent programming /No. of slots	Standard 4 devices Up to 16 devices / 4 slots	Standard 16 devices Up to 64 devices / 16 slots	Up to 20 devices / 20 slots	Up to 4 devices / 4 slots
Device functions	COPY · ERASE · BLANK · PROGRAM · VERIFY · B.P.V · E.P.V · E.P · P.V			
Programming power (Vcc)	0.9V to 3.8V (IccMAX2A)		2.8V to 3.8V (IccMax2A)	
External interfaces	USB2.0, CF Slot, I/O line for external trigger	USB2.0	USB3.0	
Data bus	Up to 64bit			
Monitor display	20 characters x 8 rows, full-dot LCD		20 characters x 4 rows, LCD (optional for AG9740S)	
Input voltage/frequency	AC90 to 240V / 50 to 60Hz		AC90 to 240V / 50 to 60Hz	
Power consumption	Up to 200VA	Up to 930VA	Up to 320VA	
Size * excluding protrusions	W235×D290×H100mm	W500×D540×H70mm	W313×D473×H89mm	W270×D160×H89 mm
Weight * excluding accessories	Approx. 3.6kg	Approx. 12kg	Approx. 5.3kg	Approx. 2kg
Other	Compliant with RoHS			

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.

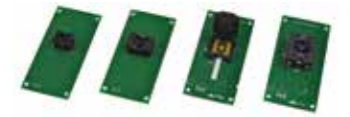
Programming time examples(W25Q64FVSSIG 64Mbit) (sec)

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

* The programming time depends on devices and environments.



Example of attaching dedicated adapters (TK series)



Various dedicated adapters

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.



Contact pins



Example of attaching adapters

We can produce various custom tools

Tests

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



Example of a custom burn-in board

Product specifications

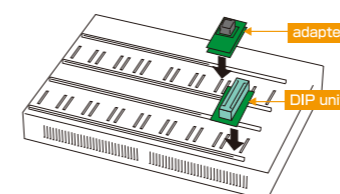
	AF9724	AF9725	AF9711
Supported devices	Up to 1Gbit 1.8 to 5V Flash memories, Flash microcontrollers, and other memories		
Speed	R/W cycle of up to 80 nsec		
Buffer memory	1Gbit as a standard (expandable to 16Gbit as an option)		
Concurrent programming	16 devices	8 devices	1 device
No. of slots	16 slots	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		Up to 33VA
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)



Example of attaching a DIP unit

Example of a DIP unit + adapter



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.



For use in engineering, manufacturing lines, and various other situations

In-Circuit Programmer

Serial programming of various Flash microcontrollers, Serial and SPI Flash

- Standard buffer memory 1Gbit
- Supports single, dual, and quad modes
- High-speed data transfer using USB2.0
- Master data management with dedicated memory cards
- Development of algorithm software for each device for free
- Supports SWD, JTAG, UART, various CLK sync types, and other special serial communication

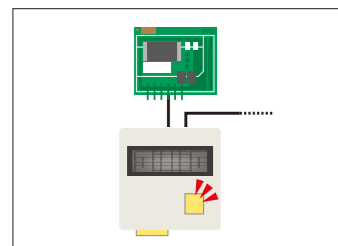
Programming time examples	SPI Flash Program (including Verify)	64Mbit	Approx. 35 sec
		512Mbit	Approx. 63 sec (with high speed algorithm, quad mode)

* Depends on devices and environments.



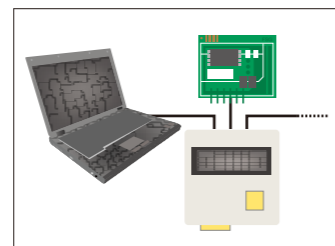
AF9201

Mode selectable according to the operating environment



Standalone mode

Select the stand-alone mode when no PC can be used or fixed data is programmed. This mode is operable with a single key.



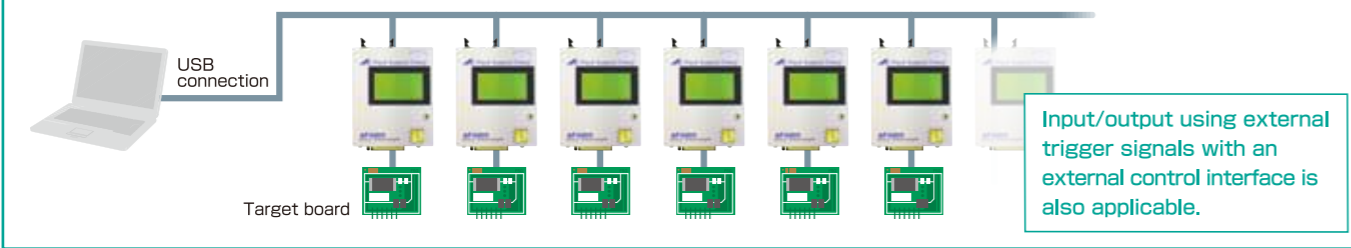
Remote mode

Useful when programming data under development or multiple sets of data continuously. Easily operable with a USB-connected PC.

For manufacturing lines 1 Gang programming by linking multiple programmers

OPTION Mass production control software for easy control

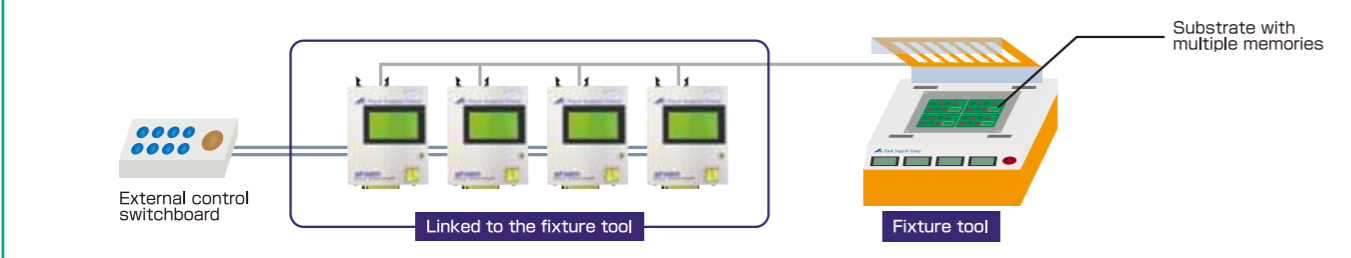
Up to 8 programmers can easily be controlled with a connected PC. Either remote simultaneous programming of all connected units or manual programming of individual units can be selected. Customization for concurrent programming under master/slave method is also available.



For manufacturing lines 2 Gang programming to multiple memories on a substrate

OPTION Custom tools can be produced

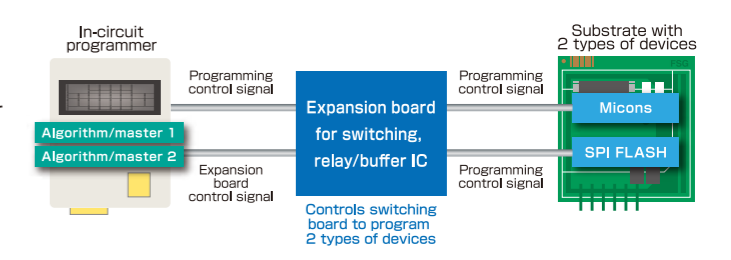
Input of operations or output of results by using trigger signals can be performed with a dedicated interface for external control. Multiple programmers linked to the system improve operability and productivity.



Examples of customization

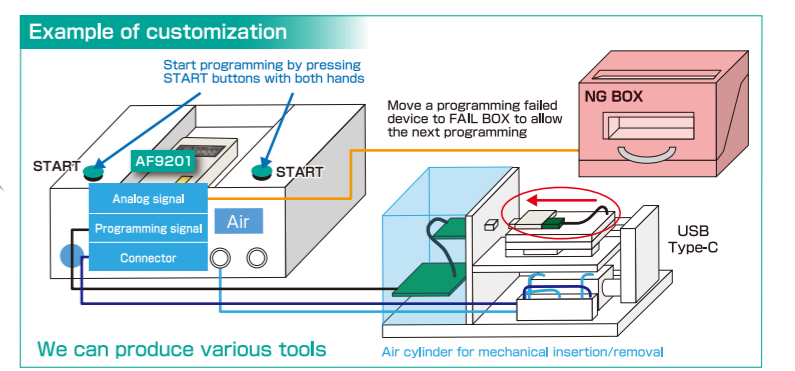
Concurrent programming to different micons/memories

For a substrate having different types of microcontrollers or memories on it, we can develop a system to manage the devices and program different data by using expansion board for switching. This eliminates the need to establish multiple programming systems, and simplifies production.



Programming to cables equipped with chips

Our original adapters for USB Type-C realized systems for programming to E-markers of various manufacturers. Control software enables settings and storage of configuration data. The adapters can also be used with AF9724/25 for mass production.



Other examples Encryption programming using a security code /programming controlled by a sequencer in a production facility / concurrent programming to substrates with multiple memories/ various test systems

Paid options

Dedicated memory card (CF card)	TECFM-1G-20 supporting 1 type of device/TECFM-1G-20-4 supporting 4 types of devices
Control software TEM1000 series	Enables various settings and device functions using a USB-connected PC
Power supply booster box	Enables output of a high voltage and control signals according to device specifications
DLL (file, manual)	Useful when you develop original control software

* One unit of the programmer is provided with one dedicated memory card. Both control software and algorithm software can be downloaded for free from our website. <http://www.j-fsg.co.jp/en/>

Product specifications

	AF9201
Supported devices	Flash ROMs, Flash microcontrollers, Serial Flash ROMs of various manufacturers supporting SPI, UART, I ² C, JTAG or CLK sync
Buffer memory*	Standard : 1Gbit (dedicated DF card)
Concurrent programming	Only 1 device at once
Device functions	COPY · ERASE · BLANK · PROGRAM · VERIFY · B.P.V · E.P.V · E.P · P.V
Programming power(V _{cc})	V _{cc} : 1.5 to 5.0V (I _{cc} : MAX 250mA)
External interfaces	Target interface (CSI, UART, I ² C, JTAG, CLK sync) USB2.0 Memory card interface External control interface
Monitor display	20 characters×8 rows, LCD
Input power voltage	AC100 - 240V DC7V (main unit) * Consult us if it exceeds AC125V.
Frequency range	50 to 60Hz
Power consumption	Up to 3VA
Size * excluding protrusions	W100×D120×H22mm
Weight * excluding accessories	Approx. 210g

* Only one series can be registered to one CF card. Another CF card is required for additional device support.

New! Programming Laser marking 2D appearance check*

High-quality all-in-one model has debuted!

TEH2724LS

Productivity

- Programming, marking and inspection are parallelly performed to output **up to 1,000 pcs/hour** (program + mark + inspection)
- 20 tray stacking possible for a long hour unmanned operation

Traceability



- Laser marking standard
- Marking of product information, a serial number, destination
- Supports QR codes and extremely small letters

High quality

- Prevents bent pins by processing images with a correction device
- Performs lead inspection and marking inspection (option)



TEH2724LS Introduction movie
<https://youtu.be/ojLF1nQcFpk>

New! Programming Laser marking 3D appearance check*

Performs 3D appearance check parallelly

TEH2724-2LSC

- High-quality 4-head robot enables output of **up to 1,440 pcs/hour** (program + mark + inspection)
- Laser marking standard
- 3D inspection detects bent leads and checks for coplanarity of leads and balls.



Programming Dot marking* 2D appearance check*

Highly productive, space-saving model

TEH2724/30C/50

- Compact body with a footprint of 1m² or less and a height of 1.4m
- Device transport 3.6 sec/device, max. 1,000 pcs/hour
- Realizes both high performance and low price



TEH2724 Introduction movie
<https://youtu.be/MUKR89K9FWU>

Laser marking system

TEH2500

- 20 trays stacked for large-volume continuous operation
- Processes images to detect devices and start marking



Label attachment system

TEH1600

- Up to 40 trays Supports label designed by customers
- Precise label attachment using image recognition



Features of our programming systems

Tray stacking

Automatic transportation of stacked supply trays enables unmanned operation for long hours. FAIL items are moved to the FAIL tray and not mixed with OK items.



CCD camera reducing adjustment work

The camera with an X-Y-Z robot detects socket positions (automatic teaching) and the position correction camera detects positions of devices picked up by transport heads. This enables devices to be attached to sockets with no damage to leads.



Traceability

The PC-based system enables monitoring of the operation status, tracing of the operation history, and data analysis.

Stamp marking (option)

Dot/alphanumeric marking using dedicated stamps enables classification of designations and specifications. (TEH2724/30C/50)



Barcode reader (option)

Using a barcode (QR code) reader prevents human error and saves time for settings. Useful in high-mix low-volume production.

Wearable terminal (option)

A watch-type wireless receiver for information of equipment failure or completion of operation. Useful when the plant has a loud noise or notification using sounds or displays is difficult.



Product specifications

	TEH2724LS	TEH2724-2LSC	TEH2724/30C/50
Incorporated programmer / Concurrent programming	AF9724 (1 unit)/up to 16 devices	AF9724(2 units)/ up to 32 devices	TEH2724: AF9724(1 unit)/up to 16 devices TEH2730C: AG9730C(2 units)/up to 32 devices TEH2750: AF9750(2 units)/up to 40 devices
Tray stage	4 trays		
Tray loader	20 trays		
Device IC socket	Open-top type		
Transporting capacity per device	3.6 sec	2.5 sec	3.6 sec
Device pick-up head	2 heads transporting 2 devices at once	4 heads for 4 devices at once	1 head for mounting and 1 head for ejecting
CCD camera	For socket position detection (2MP) For device pick-up correction (2MP) For marking and inspection (5MP)	4 units for socket position detection / device pick-up correction (2MP) 2units for marking and inspection (5MP) For 3D inspection (4MP)	2 units (0.3MP) · For socket position detection · For device pick-up position correction
Device position correction	Position correction using a CCD camera	Position correction using a CCD camera	Position correction using a CCD camera
Size (W×D×H mm) *excluding protrusions	1340×1110×1400	2300×1170×1420	990×990×1400
Weight * excluding accessories	Approx. 650kg	Approx. 1600kg	Approx. 450kg
Air	0.5MPa 250 l /min(ANR)	0.39MPa 800l/min(ANR)	0.5MPa 200l/min(ANR)
Power supply	AC200V ±10% 50/60Hz 7.7kVA three-phase	AC200V ±10% 50/60Hz 50A three-phase	AC200V ±10% 50/60Hz 20A three-phase
Options	· 2D marking inspection · 2D lead inspection · Barcode reader · Single-phase support	· Marking inspection · Lead inspection · Barcode reader · Single-phase support	· 2D marking inspection · 2D lead inspection · Stamp marking · Barcode reader · 2 million pixels CCD camera · Single-phase support
Remarks	Laser marking and an ionizer as a standard		Ionizer as a standard

Functions with * are options.

Careful, reliable and quick service only FSG, a leading programmer manufacturer, can provide.



Programming service of Flash Support Group

Uses FSG products in the processes

Supports the latest devices

We quickly support the latest devices in cooperation with semiconductor manufacturers. Also support customized specifications and 64Gbit or larger capacity devices.

High quality

Thorough temperature/humidity control and static protection. Realizes traceability with lot management. Automated inspection system makes inspection level uniform and prevents inspection leakage. No bent lead is overlooked in automated lead inspection.



Quick service

Quick, high-volume programming and inspection with automated systems. Operate 16 hours/day. Optionally, 24-hour operation is available.

TAT 1-3 days after devices and master data are provided



Low price

Realizes high efficiency with our automated programming and inspection systems.

Environment

Compliance with ISO14001 and RoHS. We can also satisfy the procurement control standard of each customer.



Wide-range support from small-lot trial manufacture to mass production

Programming/post-programming work with provided equipment

Supports reuse of circuit boards and units

Supported Devices

- Flash memory
- NAND Flash memory
- EPROM
- Flash microcontroller
- OTP microcontroller
- EEPROM
- Compact Flash
- SD/MicroSD card
- USB memory
- Custom modules
- Devices supported by our programmers
- HDD

Facilities

- Device programmers** FSG products
- AF9723 Gang Programmer
 - AF9724 Gang Programmer
 - AF9730/30B Gang Programmer
 - AG9740
 - AF9833 Gang Unit
 - AF9848 NAND Flash Gang Unit
 - AF9845 Gang Unit
 - AF9834 Gang Unit
 - AG9860 High-Speed Gang Unit
 - TE/TEF Series Adaptors

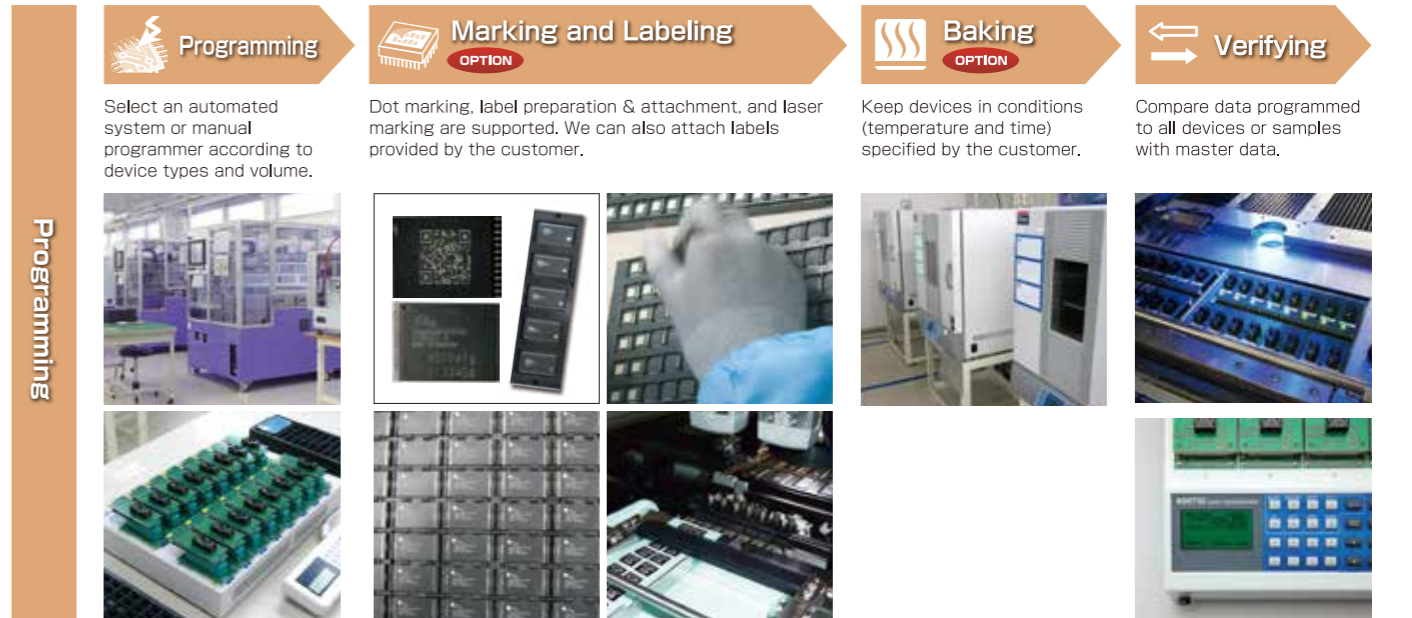
- Automated programming systems** FSG products
- TEH1220
 - TEH2010 2 units
 - TEH2024
 - TEH2724
 - TEH2724LS
 - TEH3000
 - TEH4000 2 units

- Automated laser marking systems** FSG products
- TEH1521
 - TEH1530
 - TEH2500
- Automated label attachment system** FSG product
- TEH1600

- Duplicators (CF/SD/USB)**
- Automated lead inspection systems**
- CI-3050
 - ICOS Vision Systems 3 units
- Baking systems** 3 units
- Automated label inspection systems** 2 units
- Packing systems** 2 units

Example of processes

Programming service



The above is an example. Processes can be changed to meet requirements of each customer. We will quickly handle problems in any process in accordance with our quality control rule.

Inquiries about our programming service

TEL +81-53-428-1130

URL www.j-fsg.co.jp/en/prod/pro-service/

FAX +81-53-428-1360

▶▶▶ A programming order sheet can be downloaded from our website.