

GP3000 Production Gang Programmer



GP3000 is a stand-alone gang programmer designed to support popular microcontrollers. Its unique features allow you to quickly and securely duplicate devices, without worrying the master codes being overwritten or laying around in the production floor. Currently supported devices include the PIC family from Microchip Technology.

Master Control Unit holds data securely

GP3000 consists of a Master Control Unit (MCU) which connects to various programming adapters for duplicating devices. The Master Control Unit holds the data and configuration settings securely and is protected from accidental modifications with its secured menu functions.

Features

- ❖ Program up to 8 devices at one time.
- ❖ Flash-based firmware allows easy device support updates.
- ❖ Support devices from different type of package: DIP; SOIC, TQFP and PLCC ...etc
- ❖ Data to be programmed are securely stored inside EEPROM memory of MCU and remain intact after power down.
- ❖ Checksum verification alerts user of any data corruption.
- ❖ 2x16 LCD displays function menus and program results.
- ❖ Selectable program modes.
- ❖ Program EEPROM memory of available devices.
- ❖ Program specific data range.
- ❖ All option or configuration bits are programmed.
- ❖ Adjustable Vdd, Vpp, Vdd_min and Vpp_max in 0.1V increments
- ❖ Verifies PICs at Vdd_min and Vdd_max operating voltage.
- ❖ Auto program cycle include blank check, program and two verifications voltage; takes from 10 seconds to 2 minutes depending on memory size.
- ❖ Comply with manufacturers' programming specifications.
- ❖ GP3000 MCU comes with AC adapter, parallel cable, software and printed user's guide.

On-line Mode

- ❖ Parallel port interface.
- ❖ Windows 98/ME/2000/NT hosting software.
- ❖ For downloading codes and fuse settings to the MCU.
- ❖ Support binary, Intel hex and Motorola S files.

Stand-alone Mode

- ❖ Basic operative functions for device duplication: Program, Blank Check, Verify. These functions will not overwrite data inside the MCU
- ❖ Secured functions accessible to authorized personnel for modifying codes inside the MCU include:
 - DEVICE- Select device type to be programmed
 - PROGRAM- Select one of the available program modes
 - READ- Read the contents and configuration data from the device in the program adapter to the MCU
 - CONFIG- Display and/or specify configuration bits to be programmed
 - VOLTAGE SETUP- Adjust Vpp, Vdd, Vdd_min and Vdd_max used for programming production chip
- ❖ Automatic detection of program adapter against selected device type
- ❖ Duplicate, blank check or verify one to eight devices at one time
- ❖ Different program modes allow users to duplicate devices or patch data: AUTO- blank check, program and verify; NO BLANK CHECK- bypass blank check and perform program and verify functions only; NO CODE PROTECT- specify no code protection in Auto program mode; ALL CODE PROTECT- specify code protection in Auto program mode; CONFIG ONLY- program configuration bits only

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The Software

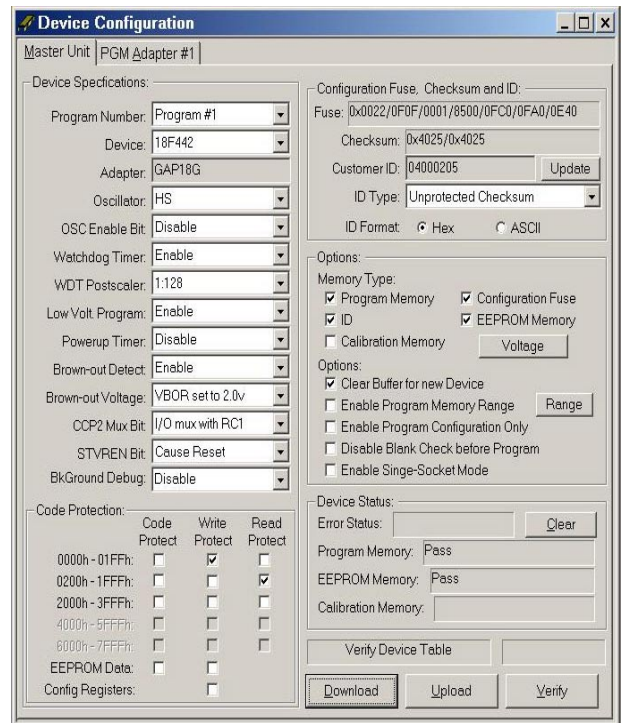
The GP3000 software runs under Windows 98/ME/NT/2000. Device Configuration is the main function window in addition to other windows for program memory, EEPROM data, etc.

Function Buttons-

- click to activate the highlight functions
- Download-Download codes and fuse settings in PC buffer To GP3000 MCU
- Upload- Read codes and fuse from MCU to PC buffer
- Verify- Compare codes and fuse from MCU against buffer
- Online Blank- Check if the device in the first socket of Program adapter is blank
- Online Read- Read the codes and fuse from device in the First socket of program adapter to the PC buffer
- Online Verify- Compare codes and fuse from device in the First socket of program adapter against PC buffer

Device Specifications-

Specify device and Configuration settings
 Configuration Fuse, Checksum and ID- Specify Customer ID used for the copied devices. Choose between The checksum or a user-specified value.



Program Adapters

Numerous 8-socket program adapters are available to work with GP3000. They support different device families and package types from Various IC manufactures. These adapters are equipped with quality zero insertion force (ZIF) sockets, each capable of about 10,000 insertions. They can be plugged directly into the GP3000 MCU via the 96-pin DIN connectors. This will provide a secure connection for quick and reliable programming. Followed are the currently available adapters.

Adapter	IC Vender	Package	Supported Devices
GAP12G-SO	Microchip	SM8	PIC12C(E)5XX(A)/67X, PIC12F629/675 (208 mil body size)
GAP1247G	Microchip	DIP8/14/18	PIC12C(E)5XX(A)/67X, PIC12F629/675 ; PIC16C505, PIC16F630/676 ; PIC16C55X/62X/61, PIC16C71X, PIC16C84/F83/F84(A); PIC16F62X; PIC16F818/819
GAP505G-SL	Microchip	SN8/SL14	PIC12C(E)5XX(A)/67X, PIC12F629/675 ; PIC16C505; PIC16F630/676 (150 mil body size)
GAP47G-SO	Microchip	SOIC18	PIC16C55X/62X/61, PIC16C71X, PIC16C84/F83/F84(A); PIC16F62X; PIC16F818/819
GAP47G-SS	Microchip	SSOP20	PIC16C55X/62X/61, PIC16C71X, PIC16C84/F83/F84(A); PIC16F62X; PIC16F818/819
GAP14G	Microchip	DIP28	PIC14000
GAP14G-SO	Microchip	SOIC28	PIC14000
GAP14G-SS	Microchip	SSOP28	PIC14000
GAP17G	Microchip	DIP40	PIC42(A)/43/44
GAP17G-PL	Microchip	PLCC44	PIC42(A)/43/44
GAP17G-PQ	Microchip	PQFP44	PIC42(A)/43/44
GAP175G-PL68	Microchip	PLCC68	PIC17C752/756(A)
GAP175G-TQ64	Microchip	TQFP64	PIC17C752/756(A)
GAP176G-PL84	Microchip	PLCC84	PIC17C762/766
GAP176G-TQ80	Microchip	TQFP80	PIC17C762/766
GAP40G	Microchip	DIP28/40	PIC16C62(B)/63(A)/65(B)/66/642/662/74(B)/773/774/745/765; PIC16F72/73/76/870/872/873/874/76/877 PIC16F873A/874A/876A/877A; PIC18(C)(F)XX2/XX8
GAP40G-SO	Microchip	SOIC28	PIC16C62/63/66/642/72/73/76/773/745, 16F870/872/873/876; PIC16F72/73/873A/876A PIC18(C)(F)2X2/2X8
GAP40G-SS	Microchip	SSOP28	PIC16C62/63/66/642/72/73/76/773/745, 16F870/872/873/876; PIC16F72/73/873A/876A PIC18(C)(F)2X2/2X8
GAP40G-PL	Microchip	PLCC44	PIC16C64/65/67/662/74/77/774/765, 16F871/874/877, PIC16F74/77/874A/877A; PIC18(C)(F)4X2/4X8
GAP40G-PQ	Microchip	PQFP44	PIC16C64/65/67/662/74/77/774/765, 16F871/874/877, PIC16F74/77/874A/877A
GAP40G-TQ	Microchip	TQFP44	PIC16C64/65/67/662/74/77/774/765, 16F871/874/877, PIC16F74/77/874A/877A; PIC18(C)(F)4X2/4X8
GAP5XG	Microchip	DIP18/28	PIC16C54/55/56/57/58
GAP5XG-SO	Microchip	SOIC18/28	PIC16C54/55/56/57/58
GAP5XG-SS20	Microchip	SSOP20	PIC16C54/56/58
GAP5XG-SS28	Microchip	SSOP28	PIC16C55/57
GAP78XG	Microchip	DIP20	PIC16C78X/770/771
GAP92X-TQ64	Microchip	TQFP64	PIC16C92X
GAP92X-PL68	Microchip	PLCC68	PIC16C92X
MPIC-ISP8A	Microchip		8 Gang programming adapter for PIC In-Circuit serial programming

*Programming adapters will support all versions of PIC devices, unless otherwise noted.

The latest support is available on our web site at www.data-action.com

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