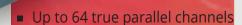
# ICP2-GANG(G3)

Production Quality In-Circuit 4 Channel Gang Programmer

ICP2-GANG(G3) is the highvolume model in our line of highspeed, production-grade in-circuit programmers for Microchip microcontrollers. Incorporating four independent channels and expandable to up to 64 channels in a daisy chain configuration, ICP2-

GANG(G3) is ideal for non-stop, mass production operations. Using our breakthrough Secure Programming technology, ICP2-GANG(G3) ensures the highest level of protection for your intellectual property during the manufacturing process.



Softlog

Systems

- Fast high-volume programming
- Innovative, multi-layer IP protection (optional)
- Easy ATE integration
- PC or standalone operations
- Cost-effective pricing options



Secure programming optional software feature provides several layers of protection that dramatically reduce the risk of unauthorized reconstruction of hex files. These include strong hex file encryption, a counter that ensures the number of programmed devices does not exceed a pre-defined value, and a secure buffer of "invisible" hex data stored in ICP2-GANG(G3) protected memory.

# Microchip-Oriented

Reflecting our focus and expertise in working with Microchip, ICP2-GANG(G3) is specifically designed for full compatibility with all Microchip microcontrollers and peripheral components. ICP2-GANG(G3) hardware virtually supports popular programming interfaces (ICSP™, JTAG, SWD, UPDI, SPI, QSPI, etc.) used by Atmel, SST and others.

# **ATE Compatible**

Final test machine (FTM) functions in DLL allow the ICP2 family software to easily integrate with test equipment, working in either standalone mode or driven by a host system. Adaptable to bed-of-nails and other types of ATEs, ICP2-GANG(G3) helps you preserve your investment in test equipment.

## 24x7 Support

We understand the importance of zero downtime on your assembly line. Softlog's technical support engineers are available round-the-clock to provide you with immediate solutions to operational and maintenance issues which may arise.

www.softlog.com

# ICP2-GANG(G3)

# Production Quality In-Circuit 4 Channel Gang Programmer

# High-Speed, Scalable Programming Device

- Designed for ICSP™, JTAG, SWD, UPDI, SPI, QSPI, etc. used by Microchip, Atmel, SST and others
- Ultra fast programming of up to 64 channels simultaneously
- Multiple devices can be connected in transparent daisy chain configuration
- On-board 32MByte flash memory per channel for nonvolatile storage of HEX, configuration and serialization files
- Multiple serialization schemes:
  - Sequential, random, pseudo-random and user file
  - 1 to 8 bytes, automatic "retlw"
- Tests Vdd and Vpp for overload with indication by software
- Dimensions: 195 x 110 x 68mm

## Programmable Hardware

- Wired remote programming via 3 lines: Go/Pass/Fail
- Programmable Vdd (1.8 to 5.5V) and Vpp (1.8 to 13.5V)
- Programmable delay between Vdd and Vpp (0.1 to 250ms)
- Programmable clock/data speed (500KHz to 10MHz)
- Programmable Vdd source: ICP2-GANG(G3) or target
- Vdd current limit: 250mA per channel
- Prevents damage to connected microcontroller in case of power ON and power OFF

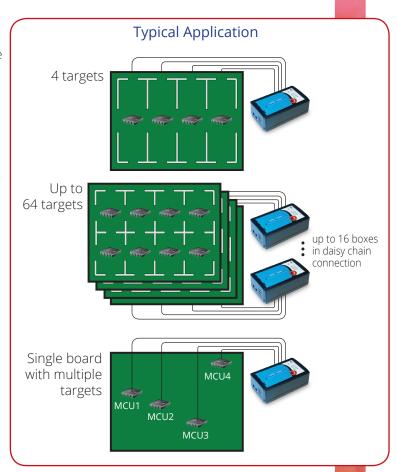
## Easy-to-Use Software

- Windows® DLL/Command line functions for automatic programming (optional)
- Secure programming feature including hex file encryption, counter and secure buffer (optional)

#### Host System Requirements

- Windows®-XP/7/8/10
- USB or RS-232 port

#### Typical in-circuit programming connection (1 channel shown) ICP2-GANG (1 CH.) PIC, dsPIC, etc. 1 1.8-5.5V VDD VDD GND GND CLOCK CLOCK VPP 6 1.8-13.5V DATA DATA MCLR/VPP USB RS232 × × × × × × × × × POWER +12...+18V To normal connection



# About Softlog Systems

Softlog Systems specializes in In-Circuit Serial Programming (ICSP™) for Microchip microcontrollers. Since 1998, our high-performance, cost-effective ICSP™ solutions have been used to manufacture millions of products worldwide. Leveraging our technical know-how and extensive field experience, Softlog Systems' ICP family of production-grade programmers reduce manufacturing costs and accelerate time-to-market.





Systems

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