

# **CHECKSUM** ✓ MultiWriter ™

# **In-System Programming**

MultiWriter is a complete turnkey solution for your on-board production programming operations. Each new project is designed and tested with your unique PCBA application to ensure you are production ready with a highly reliable, high-speed programming solution.

#### Why MultiWriter?

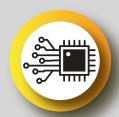
- Easy to Use, High Yield, Robust Production Programming Platform
- Fastest Programming Speeds via In-Fixture Buffer Cards
- Program an Entire Panel up to 384 Boards in Parallel
- Advanced Security for IP Protection and Secure Programming
- Algo is Tested on your PCBA'S to Ensure Device Spec Qualification
- Deployed as Stand-alone ISP System or Combine with ICT / PFT



MultiWriter™ programs the entire panel in parallel

The patented in-fixture buffer card design delivers unmatched signal integrity enabling it to simultaneously program an entire panel of up to 384 devices. Easy to use production software ensures job integrity with complete process control and reporting. Advance security features enable file encryption, serialization and embedded security key management.

## **Unmatched Parallel Test Capability**





4X Faster In-Circuit
Panel Test



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Program up to 384 Devices in Parallel

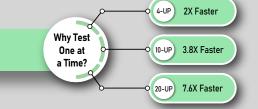


CHECKSUM **▶** PFT ™

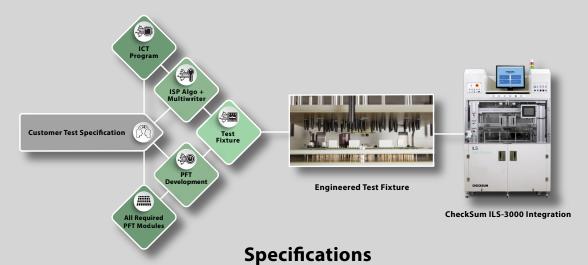
Functionally Test an Entire Panel of Boards in Parallel

### **Proven Production In-System Programming Solution**

CheckSum MultiWriter is a fast, accurate and stable in-system solution with turnkey program development, a proven platform with billions of devices programmed on over 4000 systems deployed globally. CheckSum is relied on by electronics manufacturers of automotive, telecom, medical, industrial, and consumer products. For over 30 years, CheckSum has provided flexible, cost effective test and programming solutions.



## **Turnkey Test Solution Developed to Meet Your Unique Test Specifications**



System Specifications		
Power Requirements	+12VDC, +5VDC, Programmable power for UUT(from test system)	
Number of device types	Up to 16 different devices simultaneously	
Device support	All major in-system programmable device vendors supported.	
Number of devices	Up to 384 devices can be programmed simultaneously	
Device Bus Support	JTAG(IEEE1149.1), SPI,QSPI, I2C, Serial, SWIM, MicroWire, BDM, DAP, OWI, PIC, C2	
CheckSum Project Support	Programming guaranteed to work in your PCBA. No user tweaking required.	
Data file formats supported	BIN, Motorola S-record, Intel HEX, Serial Vector Format	

Hardware Features	
Galvanic Isolation	All programming lines are relay isolated when not in use
LVDS Link to Buffers	Buffers can be located > 1.5m from MW controller
USB link to Host PC	High speed, universal link
HASP Key	All algorithms, program settings are stored with test fixture
Active Buffers	Signals close to DUT minimizes noise, maximum speed. Typical distance is < 2" (20 mm)
Programming Signal Integrity	Verified with each project, scope photos recorded of actual product signals
Hardware Node Probe	Supports system maintenance and self-test

Software Features		
Data Encryption	Data files can be secured against external reading. Decryption stays in RAM, not disk file	
Virtually Unlimited Data Size	Data files stored on host PC or network	
Easy to use GUI	Device settings, commands are easily modified, no scripts to learn	
Self-test	Fixture and controller self-tests included	
Margin Verify Supported	Device dependent	
Windows O.S. Support	Win98, XP, 7, 8, 10 supported	
Verification	Device dependent - Byte-by-byte or CRC	
Serialization	Data can be generated at programming time Serial number and calibration values	
Data Files on Servers	Programming data can be secured to any location within the customer's network	



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