The MultiWriter® on-board gang programming system uses patented simultaneous programming technology to program up to 384 chips at one time with up to 16 different types, in seconds instead of the minutes required by conventional programmers.

Compared to other part programming solutions, MultiWriter delivers significant speed and cost advantages over conventional in-circuit tester-based programmers when parts already mounted on circuit boards must be programmed in a single pass, making it especially effective for multi-board panels.

The ST-7 buffer modules insure device programming meets the required critical timing and voltage device specifications.

**The MultiWriter ST-7 Buffer features:**

- Simultaneous programming for multiple devices, 1 part or 384 parts all at the same time
- Non-multiplexed, parallel programming at the max-rated device speed
- Relay-switched isolation for signal and power to the programmed device, supports PCB panels
- In-fixture buffer modules insure quality signals to each device
- Daisy-chain control signal design for expansion to additional modules
- Designed for twisted-pair wiring for all critical signals
- Designed to work with ICT (In-Circuit Test) applications
- On board +5V power input regulator to 3.3V for stable buffer module power
- Differential input signals for CLkin, RESET, ICCDATA and SCK with series impedance to the programmed device to eliminate ringing and protect the buffer module
- Differential output from device ICCDATA signal to MultiWriter control module
- Designed for in-fixture MultiWriter controller, MultiWriter pps system or other ATE systems
- Designed for the ST-7 Microelectronics ICC (In-Circuit Communication) algorithm
ST-7 Buffer Module Specifications

- Driver Voltage: device dependent, ±16mA output drive at 3.3V
- Input Voltage from device 5.5V (max.)
- Nominal output impedance: 100 Ohms (buffer to device)
- Nominal sensor input impedance >100K Ohms (device to buffer)
- Twisted pair wiring recommended between buffer driver/sensor and device
- Buffer board nominal power supply requirement: +12V, +5V
- Driver/sensor buffer boards designed to be mounted in a bed-of-nails test fixture
- ESD Protection Exceeds JESD 22
- Buffer board dimensions: single 2.125” x 2.125” (5.4 cm x 5.4 cm), 4-up 2.125” x 8.75” (5.4 cm x 22.23 cm)