# **SAP2100**



Semi-automated Flash Station for standalone use or integrated in the production environment



This next generation of production equipment for parallel inapplication Flash programming provides state-of-the-art technology and considers current and future needs of modern electronic module manufacturing. The overriding importance for the design has been to enable easy integration into the manufacturing line and to achieve lowest production cost. Hence, resulting key criteria for the SAP2100 system have been:

- · Modular concept for easy system adaptation or upgrade
- · Quick fixture exchange with smooth, precise positioning
- Easy system setup supported by smart man-machine dialog
  & interface for administrator and operator
- · Save & simple use during operator handling
- · Extended maintenance cycles; easy access to control units
- · Full system customization

Considering these development targets, the SAP2100 system is qualified for any kind of on-board programming in high volume production. Applying intelligent handling methodologies, this system offers additional cost savings in the production cycle.

#### **Key Features**

- Integrated semi-automated programming system for on-board parallel programming
- Ergonomic workbench with adjustable equipment rack
- Up to 3 19" racks with up to 30 programming modules
- · Full parallel programming of up to 200 targets
- Based on MSP2100NET technology with integrated highperformance power supply
- Supports programming of single PCB's, multi-use panels, semi-assembled or fully housed modules and also mix-mode usage
- Bus programming via CAN, LIN, BroadR-Reach
- Industrial PC for comprehensive system control, Windows<sup>®</sup> OS, 17" TFT Monitor, keyboard with integrated mouse
- FlashTask GUI, graphical operator- and administrator user interface
- · Robust and durable housing
- Compact dimensions: 695 x 765 x 1730 (L x W x H (mm))
- · Adapter/Fixture dimensions:

Type (L x W x H (mm)) effective area SAP2100-1 515 x 320 x 270 155 x 250 mm SAP2100-2 515 x 460 x 270 295 x 250 mm SAP2100-3 585 x 620 x 270 450 x 320 mm

#### **Optional Features**

Adaptation to client's Manufacturing Execution Systems (MES)

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Optional Features

- RF –identifier "poka yoke" (Balluff) and optical identification of match between cover plate, fixture and target board
- · Integrated 2D data matrix or bar-code scanner
- · Pneumatic actuator to block closing of cover plate
- · Automatic cover lock avoiding operator misuse during programming
- · Upside, downside contacting of needles
- · Automatic start of programming process after cover closure
- Automatic opening of cover closure after successful programming process
- Various other customized solutions for automatic fixture operation / handling
- · Various installation and training options
- · Service and maintenance contracts

### MSP2100NET-Rack Technical Data

- Holds up to 10 MSP2100NET programming modules in one standard 19" rack
- Integrated Ethernet switch and power supply for programmers
- Rear panel connections: 100-240 VAC and Ethernet RJ45 host interface
- Target power supply up to 13,5V / 3,5A per channel
- Rack enclosure standard dimensions 482 x 132 x 348 mm

## Application sample of a 48- up panel

