BPM 1710 | 2710-2

The 1710 Engineering Programmer

Flash and Universal Support

The 1710 manual universal device programmer is manufactured for design engineering to low volume production. It has the versatility to program flash memory, microcontrollers, E/EPROMs, FPGAs, PLDs, antifuse, and more, with any manual or automated socket module. The 1710 is the de facto manual programmer for **aerospace/defense programming.** FX4™ socket modules are designed specifically for the 7th Generation series of programmers and have the capability of programming four devices simultaneously, enabling users to achieve greater productivity.

The 2710-2 Production Programmer

7th Gen Manual Programmer with Two Sites

The 2710 Manual Concurrent Programming System® is designed for today's microcontrollers with their long programming times. Used in combination with FX4™ socket modules, the 2710 is one of the lowest cost-per-device solutions for memory and microcontroller devices. This programmer also has the versatility to program FPGAs, PLDs, and many more device types. BPM Microsystems' concurrent programmers use fault-tolerant architecture, which means multiple programming sites operate independently within a single job session. As a result, throughput, yields, and uptime are optimized to allow a single operator to produce higher yield of programmed devices.

- Supports over 45,000 devices with voltage down to 1.5V (Vdd) including EPROM, E/EPROM, Flash EPROM, Microcontrollers, PLD, CPLD, antifuse FPGAs
- 1710 includes lifetime access to the latest BPWin software
- Uses USB 2.0 communication
- With on-board memory capable of concurrent production programming
- FX4™ socket modules include 3 separate LEDs per socket and allow the 1710 to program 4 devices simultaneously
- Compatible with both automated and manual socket modules
- Patented solution to guard against passing blank parts– available only from BPM Microsystems
- Supports all device packages, including, but not limited to, DIP, SDIP, PLCC, TSOP, SSOP, PCMCIA, QFN, MLF, LAP, SOIC, LCC, QFP, PQFP, PGA, SIMM, CSP, BGA, µBGA, TQFP and TSSOP
- Ideal for design engineering and low-volume production
- Serialization support using standard, FX, FX2, and FX4 socket modules
- Jobmaster™ files can be shared with all other 7th Gen Programmers

4910 APS

3928 APS

3901 APS

2900L Programmer

2710 Programmer

2900 Programmer

1710 Programmer

Complete Ecosystem
BPM Microsystems has ownership of all designs, manufacturing, and support for all programming sites, robotics, vision systems, and software, so we can provide unmatched support and responsiveness

- Reduce your time to market by doing New Product Introduction/First Article through Automated Production with the same hardware, algorithms, and software

- 2900, 2900L (9th Gen), 1710 & 2710 (7th Gen) for Manual Production; 3901, 3928, & 4910 for Automated Production— only BPM can deliver!

1710 | 2710-2 | 7th Gen Manual Programmers Specifications

2710-2 Manual Programmer

2-Site Model	240-pins drivers total, universal ground transistors 48 fully universal drivers with vcc, vpp, digital and clock 96 high speed digital and clock pins
Operating Voltage:	100-240 VAC
Frequency:	50-60 Hz
Current Rating:	8-4 A (Fuse 250V 6A SB)
Dimensions:	21.55" (547mm) x 8.65" (220mm) x 4.68" (119mm)
Weight:	12.2 lbs. (5.5 kg)

Hardware

Architecture:	Concurrent Programming System
Sites:	2 per chassis; multiple chassis may be linked
Calibration:	Annual; may be verified on site with optional socket module
Diagnostics:	Pin continuity test, ROM, CPU, pin drivers, power supply, communications, cables, calibration, timing, ADC, DAC, interconnects
Memory:	512MB per site
User Interface:	Pass, Fail, Active, Start LEDs and Start switch on each site; PC display shows systems status at a glance; auto-start mode automatically begins programming when a device is inserted
PC System Requirements:	Windows 10, Windows 7

PIN Drivers

Quantity:	240-pins standard
Analog Slew rate:	0.3 to 25V/µs
Vpp Range:	0-25V
Ipp Range:	0-70mA continuous, 250mA peak
Vcc Range:	0-12V
Icc Range:	0-1A
Very low voltage:	To 1.5V (Vdd)
Rise Time:	4ns
Overshoot:	None
Clocks:	Continuously variable 1 MHz to 30 MHz
Protection:	Overcurrent shutdown, power failure shutdown
Independence:	Pin drivers and waveform generators are fully independent and concurrent on each site

Award-Winning Service

Award-Winning Software
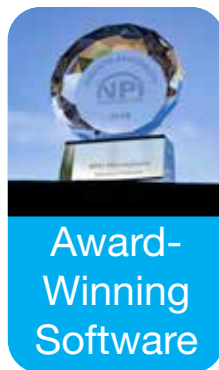
1710 Engineering Programmer

Operating Voltage:	100-240 VAC
Frequency:	50-60 Hz
Current Rating:	4-2 A (Fuse 250V 6A SB)
Dimensions:	11.75" (298mm) x 8.65" (220mm) x 4.68" (119mm)
Weight:	7.22 lbs. (3.28 kg)
Software Contract:	Lifetime access to BPWin

Hardware

Architecture:	Concurrent Programming System
Sites:	1 per chassis; multiple chassis may be linked
Calibration:	Annual; may be verified on site with optional socket module
Diagnostics:	Pin continuity test, ROM, CPU, pin drivers, power supply, communications, cables, calibration, timing, ADC, DAC, interconnects
PC System Requirements:	Windows 10, Windows 7

PIN Drivers

Quantity:	240-pins standard
Analog Slew rate:	0.3 to 25V/µs
VPP Range:	0-25V
IPP Range:	0-70mA continuous, 250mA peak
VCC Range:	0-12V
ICC Range:	0-1A
Very low voltage:	To 1.5V (Vdd)
Rise Time:	4ns
Overshoot:	None
Clocks:	Continuously variable 1 MHz to 30 MHz
Protection:	Overcurrent shutdown, power failure shutdown
Independence:	Pin drivers and waveform generators are fully independent and concurrent on each site

Software (2710/1710)

Required:	BPWin
Windows Version:	Windows 10, Windows 7 64bit
File Type:	Including, but not limited to, binary, Intel, JEDEC, Motorola, POF, RAM, straight hex, Tekhex, Extended Tekhex, ASCII hex, Formatted Binary (.DIO), AFM, OMF, LOF
Device Commands:	Blank, checksum, compare, options, program, test, verify
Features:	Data editor, revision history, session logging, on-line help, device and algorithm information

bpmmicro.com/device-programmers/manual-programming-systems/

BPM MICROSYSTEMS
Setting the Standard in Device Programming

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CE

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with globally-sourced components

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