



Item	ICP2	ICP2-STA	ICP2-GANG	ICP-01
General				
1 Availability	Now	Q4 2006	Now	Now (not recommended for new design)
2 Mechanical and electrical compatibility with ICP-01	Yes	Yes	Yes (electrical only)	Yes
3 Size	175 x 85 x 35 mm	175 x 85 x 35 mm	195 x 110 x 68 mm	175 x 85 x 35 mm
4 Target connector	D-type 15F	D-type 15F	D-type 15F x 4	D-type 15F
5 The same internal independent programming module (ICP2M-50)	Yes	Yes	Yes (4 modules per programmer)	-
6 Number of simultaneously programmed devices	1	1	4 (expandable to 64)	1
7 Built-in LCD display 16x2, programming buttons and buzzer	-	Yes	-	-
8 Full-function standalone operation	-	Yes	-	-
9 Standalone programming	Optional	Yes	Optional	-
10 USB connection	Built-in	Built-in	Built-in	USB/ RS232 adapter
11 USB-powered	Yes	Yes	-	-
12 Bluetooth interface	Optional	Optional	-	-
13 Ultra fast programming in production mode (preliminary) PIC18F8722: 131KByte	Program: 4 sec Verify : 3 sec	Program: 4 sec Verify : 3 sec	Program: 6 sec (total) Verify : 5 sec (total)	-
14 Ultra fast programming in development mode PIC18F8722: 131KByte	Program: 9 sec Verify : 7 sec	Program: 9 sec Verify : 7 sec	-	For reference: Program: 19 sec Verify : 16 sec
15 Selectable programming speed (clock/data)	As ICP-01, 500KHz-10MHz	As ICP-01, 500KHz-10MHz	As ICP-01, 500KHz-10MHz	Fixed 100-500KHz (depends on device family)
16 PASS/FAIL LEDs for programming	Yes	Yes	Yes (2 per channel)	-
17 Remote programming via 3 lines (Enter/ Pass/ Fail interface)	Optional	Optional	Optional (2 lines Pass/ fail per channel)	-
18 Selectable VDD source (power comes from target or ICP)	Yes	Yes	Yes	-
19 On-board flash memory (non-volatile storage for HEX, CFG and SER files)	1MByte	1MByte	1MByte per channel	-
20 Z-state for MCLR (weak pull-down 150KΩ)	Yes	Yes	Yes	-
21 Z-state for clock/data (weak pull-down 300KΩ)	Yes	Yes	Yes	-
22 Serialization	Yes	Yes	Yes	Yes
Technical				
23 Self-test for VDD and VPP	Yes	Yes	Yes	Yes
24 Self-test for power supply voltages	Yes	Yes	Yes	-
25 Self-test for TARGET I/Os	Yes	Yes	Yes	-
26 VDD current limit (power supply connected)	250mA	250mA	250mA per channel	250mA
27 VDD current limit (USB powered)	40mA	40mA	N/A	N/A
28 VPP current limit	50mA	50mA	50mA per channel	50mA
29 VPP drive capability (capacitive, rise time < 1us)	33nF	33nF	33nF	2nF
30 DATA/CLOCK drive capability (resistive)	2.2KΩ	2.2KΩ	2.2KΩ	5KΩ