The „terrible" 3 cent microcontroller

MCU	PTB150CSE	PMS150C-S08	BJ8P509F	PFS154-S08	MDT10P509(A)	HR7P153P45SA	PFS173-S08	HT68F001
Manufacturer	**Puolop** China www.puolop.com	**Padauk** Taiwan www.padauk.com.tw	**Bojuxing Industrial** China www.bjxmcu.com	**Padauk** Taiwan www.padauk.com.tw	**Yspring Tech / MDT** China www.yspringtech.com	**Eastsoft Micro** China www.essemi.com	**Padauk** Taiwan www.padauk.com.tw	**Holtek** Taiwan www.holtek.com
Package	SOP8-150mil	SOP8-150mil	SOP8-150mil	SOP8-150mil	SOP8-150mil	SOP8-150mil	SOP8-150mil	SOP8-150mil
Price (100pc)	0.0315 USD/pc	0.0334 USD/pc	0.0466 USD/pc	0.0692 USD/pc	0.0795 USD/pc	0.0811 USD/pc	0.0859 USD/pc	0.0875 USD/pc
CPU Architecture	PDK13 79 Instructions Stack in RAM Single cycle Interrupts: Yes	PDK13 79 Instructions Stack in RAM Single cycle Interrupts: Yes	BJ13 (PIC) 42 Instructions 5 level HW stack Single cycle? Interrupts: Yes	PDK14 82 Instructions Stack in RAM Single cycle Interrupts: Yes	PIC12 36 Instructions 2 level HW stack 4 clocks/instr. Interrupts: No	HR7P RISC 79 Instructions 8 level HW stack 2 clocks/instr.? Interrupts: Yes	PDK15 88 Instructions Stack in RAM Single cycle Interrupts: Yes	Holtek12 (PIC12) 63 Instructions 2 level HW stack 4 clocks/instr. Interrupts: Yes
ROM	1k x 13 bit OTP	1k x 13 bit OTP	1k x 13 bit OTP	2k x 14 bit Flash	1k x 12 bit OTP	2k x 16 bit OTP	3k x 15 bit Flash	0.5k x 12 bit Flash
RAM	64 Bytes	64 Bytes	49 Bytes	128 Bytes	41 Bytes	64 Bytes	256 Bytes	16 Bytes
Periphery	6 GPIO 16 bit timer 1x8 bit timer/PWM Analog comparator Brownout reset Watchdog timer	6 GPIO 16 bit timer 1x8 bit timer/PWM Analog comparator Brownout reset Watchdog timer	6 GPIO 1x8 bit timer Brownout reset Watchdog timer	6 GPIO 16 bit timer 2x8 bit timer/PWM 3x11 bit PWM Analog comparator Brownout reset Watchdog timer	6 GPIO 1x8 bit timer Brownout reset Watchdog timer	6 GPIO 2x8 bit timer/PWM 1x12bit ADC Brownout reset Watchdog timer	6 GPIO 16 bit timer 2x8 bit timer/PWM 3x11 bit PWM Analog comparator 1x8bit ADC Brownout reset Watchdog timer	6 GPIO 1x8 bit timer Brownout reset Watchdog timer
Clock	16 MHz internal 62 kHz internal	16 MHz internal 62 kHz internal	8 MHz internal External RC External XTAL	16 MHz internal 70 kHz internal External XTAL	8 MHz internal	16 MHz internal 36 kHz internal External XTAL	16 MHz internal 93 kHz internal External XTAL	- 32 kHz internal External XTAL
Programming	4+2 wire HV (12V)	4+2 wire HV (12V)	?	3+2 wire HV (8V)	?	3+2 wire HV (8.5V)	3+2 wire HV (8V)	2+2 wire ICP
Vendor IDE	?	Padauk Dev. Studio (ASM, Mini-C)	Bojuxing IDE (ASM)	Padauk Dev. Studio (ASM, Mini-C)	MDT-IDE, Yspring writer	?	Padauk Dev. Studio (ASM, Mini-C)	Holtek HT-IDE3000 (ASM)
OSS Toolchain	Tentative, SDCC >=3.9.0	Tentative, SDCC >=3.9.0	No	Yes, SDCC >=3.9.0	Yes, GPUTILS (PIC tools)	No	Yes, SDCC >=3.9.0	No
Notes	Website and datasheet in Chinese		Website in chinese, but english datasheet		PIC12C509 clone, horrible datasheet	Website and datasheet in chinese		Ultra low power

https://cpldcpu.wordpress.com/2019/08/12/the-terrible-3-cent-mcu/