

Feature comparison table

This is intended to be an accurate and fair comparison between codes, please advise if there are any errors.
MS2/Extra was based on MS2 2.6.

Feature	MS1	MS1/Extra	MS2/Microsquirt B&G	MS2/Extra 1.0	MS2/Extra 2.0
Fuel table size	8x8	12x12	12x12	12x12	12x12 or 16x16
PW resolution	100us	100us *	0.67us	0.67us	0.67us
Injector control method	bit bang	bit bang*	hardware timer	hardware timer	hardware timer
rpm resolution	100 rpm	100 rpm	1 rpm	1 rpm	1 rpm
Accel enrichment	TPS based	TPS, MAP, RPM	Simple (TPS,MAP), X-Tau	Simple (TPS,MAP), EAE	Simple (TPS,MAP), EAE
Advance table size	No spark control	12x12	12x12	12x12	12x12
Advance resolution	N/A	0.3 deg	0.1 deg	0.1 deg	0.1 deg
Spark control method	N/A	bit bang	hardware timer	bit bang*	bit bang*
EDIS	N	Y	Y	Y	Y
Distributor spark	N	Y	Y	Y	Y
Trigger return dizzy	N	Y	Y	N	Y
Simple wheel decoding	N	Y	Y	Y	Y
Every tooth wheel decoding	N	N	Y*	Y	Y*
Wasted spark	N	Y	N / Y*	Y	Y
Coil on plug	N	Y	N / Y*	Y	Y
Dual dizzy	N	Y	N	Y	Y
Cam / 2nd tach input	N	Y	Y*	Y	Y
Number of spark outputs	Nil	6	1 / 2*	4	4
Rotary trailing	N	Y	N	Y	Y
HEI7, GMDIS	N	Y (with bypass control)	Y	Y	Y (with bypass control)
TFI	N	Y	Y (requires ini mods)	Y	Y
Oddfire wheel decoder	N	Y	Y	N	N
Oddfire dizzy	N	N	N	N	Y
Neon/420A	N	Y	N	N	Y
36-1+1	N	N	N	N	Y
36-2-2-2	N	N	N	N	Y
Subaru 6/7	N	N	N	N	Y
IAW Weber-Marelli	N	N	N	N	Y (Untested!)
Mitsubishi 6g72	N	N	N	N	Y
4/1 CAS	N	Y	Probably	N	Y
4/2 CAS (Miata)	N	Y	N	N	Y
99-00 Miata	N	N	N	N	Y
Renix 44-2-2	N	Y	N	N	Y
Twin trigger (aka. dual spark)	N	N	Y*	N	Y
Suzuki Swift	N	Not with std code	N	N	Y
Suzuki Vitara	N	N	N	N	Y (Untested!)
Daihatsu 3 cyl	N	N	N	N	Y (Unproven)
Daihatsu 4cyl	N	N	N	N	Y (Untested!)
Rover K Series 36-1-1	N	N	N	N	Y (Untested!)
Rover K Series 36-1-1-1-1	N	N	N	N	Y (Untested!)
Rover K Series 36-2-2	N	N	N	N	Y (Untested!)
Honda VTR1000 12-3	N	N	N	N	Y (Untested!)
Load methods	SD, AN	SD, AN, MAF	SD, AN, MAF, map/baro	SD, AN, map/baro (load%)	SD, AN, map/baro (load%)
Load blending	N	Y?	Y	Y	Y
Load tables	1	1	1	2	2
Staged injection (Like RX7 with single table and independant control over bank 1 and 2)	N	Y	N	Y	Y
Over-run fuel cut	N	Y	N	Y	Y
Tachometer output	N	Y	Y	Y	Y
Launch Control/flat shift	N	Y	N	Y	Y
Spark cut rev limit	N	Y	N	Y	Y
Dwell duty%	N	Y	N	Y	Y
Dwell battery correction	N	built-in	table of values	table of values	table of %ages
Cranking pulsewidth	2 point	table	table + corrections	table of %ages	table of %ages
Alternate cranking injection	N	N	N	Y	Y
Specific cranking advance, dwell	N	Y	N	Y	Y
Fixed timing for setup	N	Y	N	Y	Y
Test mode	N	N	Injectors	Pump, Inj, Coils	Pump, Inj, Coils

Idle valve control	On/Off	On/Off, PWM	On/Off, PWM, Stepper	On/Off, PWM, Stepper	On/Off, PWM, Stepper
Closed loop idle control	N	Y (experimental)	N	N	Y
Boost control	N	Open loop, experimental closed loop	N	N	Y
Nitrous control	N	Y	Y (on/off only)	N	Y (2 stage)
Knock sensor	N	Y	Y	Y	Y
Realtime baro	N	Y	Y	Y	Y
Water Injection	N	Y	N	N	N
Table Switching	N	Y	N	N	Y
Shift lights	N	Y	Generic ports	Generic ports	Generic ports
Configurable outputs	N	Y	Y	Y	Y
AFR target tables	N	Y	Y	Y	Y
Automatic Mixture Control	N	N	Y	N	N
Dual fuel tables (per bank)	N	Y	Y	Y	Y
Synchronous sensor sampling	N	N	Y	N	Y
CAN communications	N	N	Y	Y (untested)	Y (untested)
Crank based injection points	N	N	Y	N	Y
Alpha-beta-gamma tracking filter	N	N	Y	N	N
Global ignition timing base control	N	N	Y	N	N