

GAME	NOTES	GAME SELECTION DIP SWITCH S5											CPU CLOCK JUMPERS		RAM WIDTH S6		
		A20	A19	A18	A17	A16	A15	A14	A13	.5Mhz	.895Mhz	D0-D4					
	COMBO ROM 07-02-20																
	REPLACING BALLY AS-2518-17	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4					
000	Black Jack	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	ON	ON	ON	ON	IN	OUT	OFF / OUT				
001	Eight Ball	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT				
002	Evel Knivel	DIP 17, 18 & 19 ON for free play. Tilt exploit fixed. Drop target down logic.	ON	ON	ON	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT				
003	Freedom	DIP 17, 18 & 19 ON for free play. Tilt exploit fixed. Drop target down logic.	ON	ON	ON	ON	ON	ON	OFF	OFF	IN	OUT	OFF / OUT				
004	Mata Hari	DIP 17, 18 & 19 ON for free play. Drop target down logic.	ON	ON	ON	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT				
005	Night Rider	DIP 17, 18 & 19 ON for free play. Tilt exploit fixed. Drop target down logic.	ON	ON	ON	ON	ON	OFF	ON	OFF	IN	OUT	OFF / OUT				
006	Night Rider Custom	Home ROM by Seymour Shaw	ON	ON	ON	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT				
007	Power Play	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT				
008	Strikes and Spares	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT				
	REPLACING BALLY AS-2518-35	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4					
009	Black Pyramid	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	ON	OFF	IN	OUT	OFF / OUT				
010	BMX	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	OFF	ON	IN	OUT	OFF / OUT				
011	Centaur	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	OFF	OFF	IN	OUT	OFF / OUT				
012	Centaur Home V27	Home ROM by Oliver O.	ON	ON	ON	ON	OFF	OFF	ON	ON	IN	OUT	OFF / OUT				
013	Cybernaut	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT				
014	Dolly	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	ON	ON	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT				
015	Eight Ball Deluxe	DIP 25 & 26 ON for free play. Multiplayer bonus bug fixed.	ON	ON	ON	ON	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT				
016	Eight Ball Deluxe Home V32	Home ROM by Oliver O.	ON	ON	ON	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT				
017	Elektra	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT				
018	Embryon	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	ON	OFF	ON	IN	OUT	OFF / OUT			
019	Embryon Home R9	Home ROM by Oliver O. DIP 32=ON for 7 digit displays	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF	IN	OUT	OFF / OUT			
020	Fathom	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	OFF	ON	ON	IN	OUT	OFF / OUT			
021	Fathom Home V5	Home ROM by Oliver O.	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF	IN	OUT	OFF / OUT			
022	Fireball Classic	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	OFF	OFF	ON	IN	OUT	OFF / OUT			
023	Fireball II	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT			
024	Flash Gordon	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	OFF	ON	ON	ON	IN	OUT	OFF / OUT			
025	Flash Gordon French	DIP 25 & 26 ON for free play. French Language	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	IN	OUT	OFF / OUT			
026	Frontier	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	OFF	ON	OFF	ON	IN	OUT	OFF / OUT			
027	Future Spa	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF	IN	OUT	OFF / OUT			
028	Harlem Globetrotters	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	ON	ON	OFF	OFF	OFF	ON	ON	IN	OUT	OFF / OUT			
029	Holdoggin'	DIP 25 & 26 ON for free play. DIP27 OFF for reset letters at EOB	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT			
030	Kings of Steel	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT			
031	Kiss	DIP 17, 18 & 19 ON for free play	ON	ON	ON	ON	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT				
032	Kiss 7-Digit	7 Digit Displays. No free play.	ON	ON	OFF	ON	ON	ON	ON	ON	IN	OUT	OFF / OUT				
033	Lost World	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT				
034	Medusa	DIP 25 & 26 ON for free play	ON	ON	OFF	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT				
035	Mr and Mrs Pacman	DIP 25 & 26 ON for free play	ON	ON	OFF	ON	ON	ON	OFF	OFF	IN	OUT	OFF / OUT				
036	Mystic	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT				
037	Nitro Ground Shaker	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	ON	OFF	ON	OFF	IN	OUT	OFF / OUT				
038	Paragon	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT				
039	Paragon 7-Digit	7 Digit Displays. No free play	ON	ON	OFF	ON	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT				
040	Playboy	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT				
041	Playboy 7-Digit	7 Digit Displays. No free play	ON	ON	OFF	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT				
042	Rolling Stones	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	OFF	ON	OFF	ON	IN	OUT	OFF / OUT				
043	Silverball Mania	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	OFF	ON	OFF	OFF	IN	OUT	OFF / OUT				
044	Skateball	DIP 25 & 26 ON for free play	ON	ON	OFF	ON	OFF	OFF	ON	ON	IN	OUT	OFF / OUT				
045	Skateball Home	DIP 25 & 26 ON for free play. Improved attract mode lighting.	ON	ON	OFF	ON	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT				
046	Space Invaders	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT				
047	Speakeasy 4 Player	DIP 25 & 26 ON for free play	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT				
048	Speakeasy 2 Player	DIP 25 & 26 ON for free play	ON	ON	OFF	OFF	ON	ON	ON	ON	IN	OUT	OFF / OUT				
049	Spectrum	DIP 25 & 26 ON for free play	ON	ON	OFF	OFF	ON	ON	ON	OFF	IN	OUT	OFF / OUT				
050	Not Used	Not used	ON	ON	OFF	OFF	ON	ON	OFF	ON	IN	OUT	OFF / OUT				
051	Spy Hunter	DIP 25 & 26 ON for free play.	ON	ON	OFF	OFF	ON	ON	OFF	OFF	IN	OUT	OFF / OUT				
052	Star Trek	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	OFF	ON	OFF	ON	ON	IN	OUT	OFF / OUT				
053	Star Trek	7 Digit Displays. No free play	ON	ON	OFF	OFF	ON	OFF	ON	OFF	IN	OUT	OFF / OUT				
054	Supersonic	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	OFF	ON	OFF	OFF	ON	IN	OUT	OFF / OUT				
055	Supersonic	7 Digit Displays. No free play	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT				
056	The Six Million Dollar Man	DIP 17, 18 & 19 ON for free play. DIP31 must be OFF.	ON	ON	OFF	OFF	OFF	ON	ON	ON	IN	OUT	OFF / OUT				
057	The Six Million Dollar Man	7 Digit Displays. No free play	ON	ON	OFF	OFF	OFF	ON	ON	OFF	IN	OUT	OFF / OUT				
058	Vector	DIP 25 & 26 ON for free play	ON	ON	OFF	OFF	OFF	ON	OFF	ON	IN	OUT	OFF / OUT				
059	Vector Home V5	Home ROM by Oliver O.	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	IN	OUT	OFF / OUT				
060	Viking	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	OFF	OFF	OFF	ON	ON	IN	OUT	OFF / OUT				
061	Voltan Escapes Cosmic Doom	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT				
062	Voltan Escapes Cosmic Doom	7 Digit Displays. No free play	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT				
063	X's and O's	DIP 25 & 26 ON for free play	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT				
064	Xenon	DIP 25 & 26 ON for free play	ON	OFF	ON	ON	ON	ON	ON	ON	IN	OUT	OFF / OUT				
	REPLACING STERN MPU-100	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4					
065	Cosmic Princess	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT				
066	Dracula	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT				
067	Hot Hand	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	ON	OFF	OFF	IN	OUT	OFF / OUT				
068	Lectronamo	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT				
065	Magic	Same ROM as Cosmic Princess	ON	OFF	ON	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT				
069	Memory Lane	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	OFF	ON	OFF	IN	OUT	OFF / OUT				
068	Nugent	Same ROM as Lectronamo	ON	OFF	ON	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT				
070	Pinball	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT				
071	Stars	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT				
070	Stingray	Same ROM as Pinball	ON	OFF	ON	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT				
072	Trident	Factory Modified ROM P11A. Unknown changes. No free play.	ON	OFF	ON	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT				
073	Trident	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	OFF	ON	ON	OFF	IN	OUT	OFF / OUT				
066	Wild Fyre	Same ROM as Dracula	ON	OFF	ON	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT				
	REPLACING STERN MPU-200	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4					
074	Ali	Stock ROM. No free play	ON	OFF	ON	ON	ON	OFF	ON	ON	OUT	IN	ON / IN				
075	Ali	Always free play	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OUT	IN	ON / IN				
076	Big Game	Stock ROM. No free play	ON	OFF	ON	ON	OFF	OFF	ON	ON	OUT	IN	ON / IN				
077	Big Game	Always free play	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OUT	IN	ON / IN				
078	Catacomb	Stock ROM. No free play	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OUT	IN	ON / IN				
079	Catacomb	Always free play	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OUT	IN	ON / IN				

GAME	NOTES	GAME SELECTION DIP SWITCH S5										CPU CLOCK JUMPERS		RAM WIDTH S6
		A20	A19	A18	A17	A16	A15	A14	A13	.5Mhz	.895Mhz	D0-D4		
	COMBO ROM 07-02-20	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8		B1	S1	DIP-1 TO DIP-4	
STERN MPU-200 **	REPLACING STERN MPU-200													
080	Cheetah	ON	OFF	ON	OFF	ON	ON	ON	ON	ON	OUT	IN	ON / IN	
081	Cheetah	ON	OFF	ON	OFF	ON	ON	ON	OFF	ON	OUT	IN	ON / IN	
082	Cheetah	ON	OFF	ON	OFF	ON	ON	OFF	ON	ON	OUT	IN	ON / IN	
083	Cheetah Home	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OUT	IN	ON / IN	
084	Dragonfist	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON	OUT	IN	ON / IN	
085	Dragonfist	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OUT	IN	ON / IN	
086	Dragonfist Home v1106	ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OUT	IN	ON / IN	
087	Flight 2000	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OUT	IN	ON / IN	
088	Flight 2000	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON	OUT	IN	ON / IN	
132	Flight 2000 V33 Home ROM	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	OUT	IN	ON / IN	
089	Freefall	ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OUT	IN	ON / IN	
090	Freefall	ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OUT	IN	ON / IN	
091	Galaxy	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OUT	IN	ON / IN	
092	Galaxy	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OUT	IN	ON / IN	
093	Iron Maiden	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OUT	IN	ON / IN	
094	Iron Maiden	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OUT	IN	ON / IN	
095	Lightning	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OUT	IN	ON / IN	
096	Lightning	ON	OFF	OFF	ON	ON	ON	ON	ON	ON	OUT	IN	ON / IN	
097	Meteor	ON	OFF	OFF	ON	ON	ON	ON	OFF	ON	OUT	IN	ON / IN	
098	Meteor 7 Digit	ON	OFF	OFF	ON	ON	ON	OFF	ON	ON	OUT	IN	ON / IN	
099	Meteor Divide by 10	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OUT	IN	ON / IN	
100	Meteor Free	ON	OFF	OFF	ON	ON	OFF	ON	ON	ON	OUT	IN	ON / IN	
101	Nine Ball	ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OUT	IN	ON / IN	
102	Nine Ball	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OUT	IN	ON / IN	
103	Orbitor One	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OUT	IN	ON / IN	
104	Orbitor One	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON	OUT	IN	ON / IN	
105	Orbitor One	ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OUT	IN	ON / IN	
106	Quicksilver	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OUT	IN	ON / IN	
107	Quicksilver	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OUT	IN	ON / IN	
108	Seawitch	ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OUT	IN	ON / IN	
109	Seawitch	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OUT	IN	ON / IN	
110	Split Second	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OUT	IN	ON / IN	
111	Split Second	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OUT	IN	ON / IN	
112	Star Gazer	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON	OUT	IN	ON / IN	
113	Star Gazer	ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OUT	IN	ON / IN	
114	Star Gazer Home R9	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OUT	IN	ON / IN	
129	Star Gazer Seymour Home V6	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	OUT	IN	ON / IN	
115	Viper	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OUT	IN	ON / IN	
116	Viper	ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OUT	IN	ON / IN	
	Bally Video and Special	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8		B1	S1	DIP-1 TO DIP-4	
117	Baby Pacman	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	IN	OUT	OFF / OUT	
118	Granny and the Gators	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	IN	OUT	OFF / OUT	
119	Grand Slam 2 Player	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT	
120	Grand Slam 4 Player	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	IN	OUT	OFF / OUT	
121	Goldball	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	IN	OUT	OFF / OUT	
122	Goldball Home	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	IN	OUT	OFF / OUT	
123	Mystic Star	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	IN	OUT	OFF / OUT	
124	World Defender	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	IN	OUT	OFF / OUT	
125	Super Bowl	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	IN	OUT	OFF / OUT	
126	Super Bowl	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	IN	OUT	OFF / OUT	
127	Satum 2	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT	
128	Midnight Mauraders	OFF	ON	ON	ON	ON	ON	ON	ON	ON	IN	OUT	OFF / OUT	
130	Rapid Fire	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT	
131	Black Beauty	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT	
133	Monroe Bowl	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT	
254	MEMORY CLEAR **	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	EITHER B1 OR S1 IN		ON / IN	

NOTES:

RAM width may be zero ohm jumper shunts(OUT / IN) or a DIP switch (OFF / ON). IN / ON for MPU200 only.

B1 and S1 jumpers set the CPU clock speed. B IN for 0.5MHz (Bally -17, -35, -133 and Stern MPU-100). S IN for 0.895MHz (Stern MPU-200)

Jumper shunt U2 Enable is removed when the U1 expanded ROM socket is used.

Clear audits with the Test and NMI Audit Clear buttons after switching games.

Starting in Revision 14 the game select dip switch is orientated so UP is on and DOWN is off.

**** If you experience wrong sounds in a Stern Meteor use the MEMORY CLEAR software (DEC # 254). Power up and when the LED begins to blink the memory has been cleared.**

***** DIP 21 Must be off when using original six digit displays in a game that supports seven digit displays.**

MPU Setup pictures at <http://nvram.weebly.com/mpu.html>