MAVEN STATIC Modes

APID		Name	En	Mass	Def	An	Misc	Byt	#/pkt	size	%ovhd
2A	Hkp	Hkp	1	1	1	1	1	146	1.00	156	6.4
C0	64Ex2M	P1A	64	2	1	1	1	1	8.00	1040	1.5
C2	32Ex32M	P1B	32	32	1	1	1	1	1.00	1040	1.5
C4	4Ex64M	P1C	4	64	1	1	1	1	4.00	1040	1.5
C6	32Ex64M	P1D	32	64	1	1	1	1	0.50	1040	1.5
C8	32Ex16D	P2	32	1	16	1	1	1	2.00	1040	1.5
CA	16Ex4Dx16A	P3	16	1	4	16	1	1	1.00	1040	1.5
CC	32Ex32Mx8D	P4A	32	32	8	1	1	1	0.13	1040	1.5
CD	32Ex32Mx8D	P4A-burst	32	32	8	1	1	1	0.13	1040	1.5
CE	16Ex16Mx4Dx16A	P4B	16	16	4	16	1	1	0.06	1040	1.5
CF	16Ex16Mx4Dx16A	P4B-burst	16	16	4	16	1	1	0.06	1040	1.5
D0	32Ex8Mx4Dx16A	P4C	32	8	4	16	1	1	0.06	1040	1.5
D1	32Ex8Mx4Dx16A	P4C-burst	32	8	4	16	1	1	0.06	1040	1.5
D2	32Ex8Mx16A	P4D	32	8	1	16	1	1	0.25	1040	1.5
D3	32Ex8Mx16A	P4D-burst	32	8	1	16	1	1	0.25	1040	1.5
D4	2Mx4Dx16A	P4E	1	2	4	16	1	1	8.00	1040	1.5
D6	Events	Events	1	1	1	1	49152	1	0.02	1040	1.5
D7	Fst Hkp	Fst Hkp	1	1	1	1	512	2	1.00	1040	1.5
D8	Rate1	Rate1	1	1	1	1	12	1	16.00	208	7.7
D9	Rate2	Rate2	64	1	1	1	12	1	1.00	784	2.0
DA	Rate3	Rate3	64	1	1	1	1	1	16.00	1040	1.5
DB	1024M	MassHist	1	1024	1	1	1	1	1.00	1040	1.5

% Orbit in mode

Survey Data Rate

NTE survey rate to s/c 14500

Burst Data Rate

Event rate 0

Orbit Averaged Survey Data Rate

NTE 2200

14	minutes at RAM rate (per 4.5 hr orbit)
21	minutes at CONIC rate (per 4.5 hr orbit)
3	minutes at SCAN rate (per 4.5 hr orbit)
232	minutes in PICKUP mode (per 4.5 hour orbit)
6	mode changes per orbit (generate events)

Notes: change the RTS_STASTART.py and Mode commands to include cmd.PFP_LOADTABLE(21,12,0x01) so that event readout is at 1 kbit/s rather than 2 kbit/s

Mode 1 x
Default at ATLO

APID		Ram	rate	Conic	rate	Pickup	rate	Scan	rate
2A	Hkp	32	39.0	32	39.0	32	39.0	32	39.0
C0	64Ex2M	4	260.0	4	260.0	8	130.0	4	260.0
C2	32Ex32M	8	1040.0	8	1040.0	128	65.0	1.00E+10	0.0
C4	4Ex64M	4	520.0	4	520.0	32	65.0	1.00E+10	0.0
C6	32Ex64M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	128	130.0
C8	32Ex16D	8	520.0	8	520.0	1.00E+10	0.0	1.00E+10	0.0
CA	16Ex4Dx16A	8	1040.0	8	1040.0	1.00E+10	0.0	1.00E+10	0.0
CC	32Ex32Mx8D	64	1040.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CD	32Ex32Mx8D	4	16640.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CE	16Ex16Mx4Dx16A	1.00E+10	0.0	128	1040.0	1.00E+10	0.0	1.00E+10	0.0
CF	16Ex16Mx4Dx16A	1.00E+10	0.0	4	33280.0	1.00E+10	0.0	1.00E+10	0.0
D0	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	256	520.0	1.00E+10	0.0
D1	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	4	33280.0	1.00E+10	0.0
D2	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	64	520.0
D3	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	4	8320.0
D4	2Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	8	130.0	1.00E+10	0.0
D6	Events	2700	147.9	2700	147.9	2700	147.9	2700	147.9
D7	Fst Hkp	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
D8	Rate1	4	26.0	4	26.0	8	13.0	8	13.0
D9	Rate2	128	49.0	128	49.0	256	24.5	256	24.5
DA	Rate3	4	130.0	4	130.0	8	65.0	4	130.0
DB	1024M	64	130.0	64	130.0	256	32.5	256	32.5
			0.051852		0.077778		0.859259		0.011111
		peak	4794.0		4794.0		1084.0		1149.0 NTE 14500
			16640.0		33280.0		33280.0		8320.0
								survey	1713.6 NTE 2200
								burst	32139.9 NTE 11000

Mode 1.5 x

APID		Ram	rate	Conic	rate	Pickup	rate	Scan	rate
2A	Hkp	32	39.0	32	39.0	32	39.0	32	39.0
C0	64Ex2M	4	260.0	4	260.0	8	130.0	8	130.0
C2	32Ex32M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C4	4Ex64M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C6	32Ex64M	4	4160.0	4	4160.0	16	1040.0	16	1040.0
C8	32Ex16D	4	1040.0	4	1040.0	16	260.0	1.00E+10	0.0
CA	16Ex4Dx16A	4	2080.0	4	2080.0	1.00E+10	0.0	1.00E+10	0.0
CC	32Ex32Mx8D	32	2080.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CD	32Ex32Mx8D	4	16640.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CE	16Ex16Mx4Dx16A	1.00E+10	0.0	32	4160.0	1.00E+10	0.0	1.00E+10	0.0
CF	16Ex16Mx4Dx16A	1.00E+10	0.0	4	33280.0	1.00E+10	0.0	1.00E+10	0.0
D0	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	512	260.0	1.00E+10	0.0
D1	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	16	8320.0	1.00E+10	0.0
D2	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	16	2080.0
D3	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	4	8320.0
D4	2Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	8	130.0	1.00E+10	0.0
D6	Events	2700	147.9	2700	147.9	2700	147.9	2700	147.9
D7	Fst Hkp	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
D8	Rate1	4	26.0	4	26.0	4	26.0	4	26.0
D9	Rate2	128	49.0	128	49.0	128	49.0	128	49.0
DA	Rate3	4	130.0	4	130.0	4	130.0	4	130.0
DB	1024M	16	520.0	16	520.0	128	65.0	128	65.0

			0.051852		0.077778		0.859259		0.011111	
		peak	10384.0		12464.0		2129.0		3559.0	NTE 14500
			16640.0		33280.0		8320.0		8320.0	
								survey	3524.7	NTE 3300
								burst	10692.7	NTE 11000

Mode 2 x

APID		Ram	rate	Conic	rate	Pickup	rate	Scan	rate
2A	Hkp	32	39.0	32	39.0	32	39.0	32	39.0
C0	64Ex2M	4	260.0	4	260.0	4	260.0	4	260.0
C2	32Ex32M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C4	4Ex64M	1.00E+10	0.0	1.00E+10	0.0	4	520.0	4	520.0
C6	32Ex64M	4	4160.0	4	4160.0	16	1040.0	16	1040.0
C8	32Ex16D	4	1040.0	4	1040.0	16	260.0	1.00E+10	0.0
CA	16Ex4Dx16A	4	2080.0	4	2080.0	1.00E+10	0.0	1.00E+10	0.0
CC	32Ex32Mx8D	32	2080.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CD	32Ex32Mx8D	4	16640.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CE	16Ex16Mx4Dx16A	1.00E+10	0.0	32	4160.0	1.00E+10	0.0	1.00E+10	0.0
CF	16Ex16Mx4Dx16A	1.00E+10	0.0	4	33280.0	1.00E+10	0.0	1.00E+10	0.0
D0	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	512	260.0	1.00E+10	0.0
D1	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	16	8320.0	1.00E+10	0.0
D2	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	16	2080.0
D3	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	4	8320.0
D4	2Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	4	260.0	1.00E+10	0.0
D6	Events	2700	147.9	2700	147.9	2700	147.9	2700	147.9
D7	Fst Hkp	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
D8	Rate1	4	26.0	4	26.0	4	26.0	4	26.0
D9	Rate2	128	49.0	128	49.0	128	49.0	128	49.0
DA	Rate3	4	130.0	4	130.0	4	130.0	4	130.0
DB	1024M	4	2080.0	4	2080.0	64	130.0	64	130.0

			0.051852		0.077778		0.859259		0.011111
		peak	11944.0		14024.0		2974.0		4274.0 NTE 14500
			16640.0		33280.0		8320.0		8320.0
								survey	4460.9 NTE 4400
								burst	10692.7 NTE 11000

Mode 3.25 x

APID		Ram	rate	Conic	rate	Pickup	rate	Scan	rate
2A	Hkp	32	39.0	32	39.0	32	39.0	32	39.0
C0	64Ex2M	4	260.0	4	260.0	4	260.0	4	260.0
C2	32Ex32M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C4	4Ex64M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C6	32Ex64M	4	4160.0	4	4160.0	4	4160.0	4	4160.0
C8	32Ex16D	4	1040.0	4	1040.0	4	1040.0	4	1040.0
CA	16Ex4Dx16A	4	2080.0	4	2080.0	1.00E+10	0.0	1.00E+10	0.0
CC	32Ex32Mx8D	32	2080.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CD	32Ex32Mx8D	4	16640.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CE	16Ex16Mx4Dx16A	1.00E+10	0.0	32	4160.0	1.00E+10	0.0	1.00E+10	0.0
CF	16Ex16Mx4Dx16A	1.00E+10	0.0	4	33280.0	1.00E+10	0.0	1.00E+10	0.0
D0	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	128	1040.0	1.00E+10	0.0
D1	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	16	8320.0	1.00E+10	0.0
D2	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	16	2080.0
D3	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	4	8320.0
D4	2Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	4	260.0	1.00E+10	0.0
D6	Events	2700	147.9	2700	147.9	2700	147.9	2700	147.9
D7	Fst Hkp	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
D8	Rate1	4	26.0	4	26.0	4	26.0	4	26.0
D9	Rate2	128	49.0	128	49.0	128	49.0	128	49.0
DA	Rate3	4	130.0	4	130.0	4	130.0	4	130.0
DB	1024M	4	2080.0	4	2080.0	64	130.0	64	130.0
			0.051852		0.077778		0.859259		0.011111
		peak	11944.0		14024.0		7134.0		7914.0 NTE 14500
			16640.0		33280.0		8320.0		8320.0
								survey	8075.9 NTE 7150
								burst	10692.7 NTE 11000

Mode 1 x

APID		Ram	rate	Conic	rate	Pickup	rate	Scan	rate
2A	Hkp	32	39.0	32	39.0	32	39.0	32	39.0
C0	64Ex2M	4	260.0	4	260.0	16	65.0	16	65.0
C2	32Ex32M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C4	4Ex64M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C6	32Ex64M	4	4160.0	4	4160.0	64	260.0	64	260.0
C8	32Ex16D	4	1040.0	4	1040.0	64	65.0	1.00E+10	0.0
CA	16Ex4Dx16A	4	2080.0	4	2080.0	1.00E+10	0.0	1.00E+10	0.0
CC	32Ex32Mx8D	64	1040.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CD	32Ex32Mx8D	4	16640.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CE	16Ex16Mx4Dx16A	1.00E+10	0.0	64	2080.0	1.00E+10	0.0	1.00E+10	0.0
CF	16Ex16Mx4Dx16A	1.00E+10	0.0	4	33280.0	1.00E+10	0.0	1.00E+10	0.0
D0	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	512	260.0	1.00E+10	0.0
D1	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	16	8320.0	1.00E+10	0.0
D2	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	16	2080.0
D3	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	4	8320.0
D4	2Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	16	65.0	1.00E+10	0.0
D6	Events	2700	147.9	2700	147.9	2700	147.9	2700	147.9
D7	Fst Hkp	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
D8	Rate1	4	26.0	4	26.0	4	26.0	4	26.0
D9	Rate2	128	49.0	128	49.0	128	49.0	128	49.0
DA	Rate3	4	130.0	4	130.0	4	130.0	4	130.0
DB	1024M	64	130.0	64	130.0	256	32.5	256	32.5
			0.051852		0.077778		0.859259		0.011111
		peak	8954.0		9994.0		991.5		2681.5 NTE 14500
			16640.0		33280.0		8320.0		8320.0
								survey	2271.3 NTE 2200
								burst	10692.7 NTE 11000

Mode 4.5 x

APID		Ram	rate	Conic	rate	Pickup	rate	Scan	rate
2A	Hkp	32	39.0	32	39.0	32	39.0	32	39.0
C0	64Ex2M	4	260.0	4	260.0	4	260.0	4	260.0
C2	32Ex32M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C4	4Ex64M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C6	32Ex64M	4	4160.0	4	4160.0	4	4160.0	4	4160.0
C8	32Ex16D	4	1040.0	4	1040.0	4	1040.0	4	1040.0
CA	16Ex4Dx16A	4	2080.0	4	2080.0	4	2080.0	1.00E+10	0.0
CC	32Ex32Mx8D	16	4160.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CD	32Ex32Mx8D	4	16640.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CE	16Ex16Mx4Dx16A	1.00E+10	0.0	32	4160.0	1.00E+10	0.0	1.00E+10	0.0
CF	16Ex16Mx4Dx16A	1.00E+10	0.0	4	33280.0	1.00E+10	0.0	1.00E+10	0.0
D0	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	64	2080.0	1.00E+10	0.0
D1	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	16	8320.0	1.00E+10	0.0
D2	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	16	2080.0
D3	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	4	8320.0
D4	2Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	4	260.0	1.00E+10	0.0
D6	Events	2700	147.9	2700	147.9	2700	147.9	2700	147.9
D7	Fst Hkp	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
D8	Rate1	4	26.0	4	26.0	4	26.0	4	26.0
D9	Rate2	128	49.0	128	49.0	128	49.0	128	49.0
DA	Rate3	4	130.0	4	130.0	4	130.0	4	130.0
DB	1024M	4	2080.0	4	2080.0	64	130.0	64	130.0
			0.051852		0.077778		0.859259		0.011111
		peak	14024.0		14024.0		10254.0		7914.0 NTE 14500
			16640.0		33280.0		8320.0		8320.0
								survey	10864.6 NTE 9900
								burst	10692.7 NTE 11000

Mode 4 x

APID		Ram	rate	Conic	rate	Pickup	rate	Scan	rate
2A	Hkp	32	39.0	32	39.0	32	39.0	32	39.0
C0	64Ex2M	4	260.0	4	260.0	4	260.0	4	260.0
C2	32Ex32M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C4	4Ex64M	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
C6	32Ex64M	4	4160.0	4	4160.0	4	4160.0	4	4160.0
C8	32Ex16D	4	1040.0	4	1040.0	4	1040.0	4	1040.0
CA	16Ex4Dx16A	4	2080.0	4	2080.0	4	2080.0	1.00E+10	0.0
CC	32Ex32Mx8D	16	4160.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CD	32Ex32Mx8D	4	16640.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
CE	16Ex16Mx4Dx16A	1.00E+10	0.0	32	4160.0	1.00E+10	0.0	1.00E+10	0.0
CF	16Ex16Mx4Dx16A	1.00E+10	0.0	4	33280.0	1.00E+10	0.0	1.00E+10	0.0
D0	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	128	1040.0	1.00E+10	0.0
D1	32Ex8Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	16	8320.0	1.00E+10	0.0
D2	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	16	2080.0
D3	32Ex8Mx16A	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	4	8320.0
D4	2Mx4Dx16A	1.00E+10	0.0	1.00E+10	0.0	4	260.0	1.00E+10	0.0
D6	Events	2700	147.9	2700	147.9	2700	147.9	2700	147.9
D7	Fst Hkp	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0	1.00E+10	0.0
D8	Rate1	4	26.0	4	26.0	4	26.0	4	26.0
D9	Rate2	128	49.0	128	49.0	128	49.0	128	49.0
DA	Rate3	4	130.0	4	130.0	4	130.0	4	130.0
DB	1024M	4	2080.0	4	2080.0	64	130.0	64	130.0
			0.051852		0.077778		0.859259		0.011111
		peak	14024.0		14024.0		9214.0		7914.0 NTE 14500
			16640.0		33280.0		8320.0		8320.0
								survey	9971.0 NTE 8800
								burst	10692.7 NTE 11000