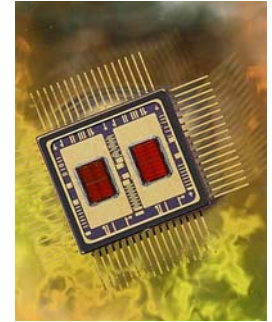


# Aeroflex 4M SRAM

## Industry Comparison



	<b>0.18µm CMOS Aeroflex</b>	<b>0.25µm Bulk CMOS</b>	<b>0.35µm CMOS SOI</b>	<b>0.25µm CMOS</b>
<b>Feature</b>				
<b>Process Technology</b>	0.18µm	0.25µm	0.35µm	0.25µm
<b>Operating Speed</b>	66 MHz @ 15ns	28MHz @ 30 ns	40 MHz @20ns	66MHz @ 15ns
<b>Organization</b>	512K x 8	512K x 8	512K x 8	512 x 8
<b>Access Time</b>	15 ns (-55° to 125°C)	30ns(-55° to 125°C)	< 20 ns (-55° to 125°C)	15ns (-55° to 125°C)
<b>Data Setup</b>	512K x 8 - 7 ns	20ns	15 ns	7 ns
<b>Data Hold</b>	512K x 8 - 2 ns	6ns	1 ns	0 ns
<b>tGLQV</b>	512K x 8 - 7 ns	11ns	5 ns	7 ns
<b>Power Supply</b>	Dual Core-1.8V (1.7V - 1.9V) I/O - 3.0V (3.0V - 3.6V)	Single 3.3V	Single 3.3V (3.0V - 3.6V)	Single 3.3V (3.0 - 3.6V)
<b>Power Consumption</b>				
<b>Active</b>	Core = 22 mW @ 1 MHz  I/O = 1 mW @ 1 MHz Total = 23 mW @ 1 MHz worst case	23 mW @ 1 MHz typical	32.4 mW @ 1 MHz worst case	36 mW (max) @ 1MHz
<b>Active</b>	Core = 57 mW @ 66 MHz I/O = 14mW @ 66 MHz Total = 71mW @ 66 MHz worst case	1.1W @ 28MHz worst case	936 mW @ 40 MHz worst case	680mW@66MHz worst case
<b>Standby</b>	Core = 20.9 mW I/O = 0.36 mW Total = 21 mW worst case	15 mW worst case	36 mW typical	7.2mW worst case
<b>Packages</b>	36 Lead Ceramic Flat Pack	40 - Lead Flat Pack,	36 - Lead Flat Pack	36 – Lead Flat Pack
<b>Standard Microcircuit Drawing (SMD)</b>	5962-03235 (512K x 8)	5962-07210	5962-06203	562-05205
<b>QML Qualified</b>	Q and V	Q and V	Q and V	Q and V
<b>Radiation Specifications</b>				
<b>Total Dose</b>	3 x 10 <sup>5</sup> rad(Si)	5 x 10 <sup>6</sup> rad(Si)	> 3 x 10 <sup>5</sup> rad(Si)	> 3 x 10 <sup>5</sup> rad(Si)
<b>SEL</b>	> 100 MeV – cm <sup>2</sup> /Mg	>120 MeV – cm <sup>2</sup> /Mg	> 1 x 10 <sup>6</sup> rad(Si) (25ns ONLY)	
<b>SEU</b>	< 8x10-10 Upsets/Bit-Day	< 1x10-10 Upsets/Bit-Day	< 1x10-10 Upsets/Bit-Day	< 1x10-9 Upsets/Bit-Day

Note: We also offer a 128K x 32 RadHard 4M SRAM — check with factory for specifications.