Test Org.*	Device	Function	Technology	Mfr.	Effective SEU LET* Threshold	Device Xsection (cm^2)	Bits Tested	Bit Xsection (cm^2)	Test Date	LUth	LU Xsection (cm^2)	Fac.	Remarks 23-Aug-99
		Microcontroller											
	Note: Entries in **RED** indicate data added since the 1997 Compendium.												
JPL	68HCS705	8-bit	CMOS/epi	MOT					Jun-93	7	5.0E-03	BNL	Xsection @ LET=56; in standby mode. Part of RF modem.
BREL	87C51FB & 87C51FC	8-bit	CHMOSIII-E (256 byte RAM)	INT	~3		2300	4.0E-06	Aug-92	10	1.0E-03	UCB	Oberg, et al, 93IEEE Wrkshp Rec., pg 43. 256 byte RAM tested at 6V. See following. Proton upsets.
JPL	87C552 (inc. 80C51)	8-bit	CMOS	SGN					Jun-93	11	4.0E-03	BNL	Standard mode. MicroC has 80C51 microP
JPL	AM29CEPL154	MicroController	CMOS	AMD					Jun-92	10	2.0E-03	BNL	
ARSP	AM85C30	8- or 16-bit Serial Communications Controller	CMOS	AMD					1994	20	1.0E-03	UCB	Koga
CNES	MHS80C31	8-bit	CMOS/epi (8 µm)	MHS					Oct-89	>37	4.0E-06	GANIL	D/C 8921
CNES	MHS80C31	8-bit	CMOS/epi (10 µm)	MHS					Feb-90	<25	2.0E-06	IPN	
BDS	RH80C51FC	8-bit	CMOS/epi	UTM	20	1.0E-04			1993	>37		UCB	Baze, et al, 93IEEE TNS, No. 6, pg 1703. Boeing redesign.

Legend

Manufacturers: AMD - Advanced Microdevices; INT - Intel; MHS - Matra Harris Semiconductor; MOT - Motorola Semiconductor; SGN - Signetics; UTM - United Technologies Microelectronics Center

Test Organizations

CNES - Centre National d'etudes Spatiales, Toulouse, France
ESA - European Space Agency, Noordwijk, Netherlands
GE - General Electic, Valley Forge, PA
GSFC - Goddard Space Flight Center, Greenbelt, MD
JPL - Jet Propulsion Laboratory, Pasadena, CA
MMS - Matra Marconi Space, France

Radiation Test Facilities

BNL - Tandem Van de Graaff, Brookhaven National Laboratories, Long Island, NY
GANIL - GANIL Accelerator, France
IPN - Insitute Physique Nuclaire, University of Orsay, France
UCB - 88-inch Cyclotron, University of California, Berkeley, CA