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 20-Aug-99
		ADC (16-bit)											
	Note: Entries in **RED** indicate data added since the 1997 Compendium.												
GSFC	**7805LPRP**	**100 KSPS. 100mW max. pwr dissapation. Parallel output**	**CMOS**	**SEI**	**<1.45**				**1997**	**~11.4**		**BNL**	**O'Bryan, et al, 98IEEE Wrkshp Rec., pg 39. D/C 9435. Latchup protection circuit test - OK.**
SEI	**7809LRP**	**100 KSPS. 100mW max. pwr dissapation. Serial output**	**CMOS**	**BUB**	**18**	**5.0E-05**			**Mar-97**	**19.9**	**3.0E-05**	**BNL**	**Layton, et al, 98IEEE Wrkshp Rec., pg 170.**
ESA	**AD676AD**	**Parallel, sucessive approx., 10 µs conv. Time**	**Hybrid Bi-MOS II**	**ADI**	**~1.8**	**>5.0E-04 digital chip**			**1997**	**>28**		**CYC**	**Bee, et al, 98IEEE Wrkshp Rec., pg 58. Transient and lingering errors recorded.**
GSFC	AD676BD	Parallel sucessive approx., 10 µs conv. time.	Hybrid: CMOS & BiMOS II	ADI	<3.4				1994				
Ball	AD677	100 KSPS. Serial output	Hybrid: CMOS & BiMOS II	ADI	3.4				Dec-94				
ESA	**AD7884AQ**	**Two pass flash, 5.3 s conv. Time**	**LC^2MOS**	**ADI**	**~2**	**2.5E-03**			**1997**	**>68**		**CYC**	**Bee, et al, 98IEEE Wrkshp Rec., pg 58.**
GSFC	**AD976**	**parallel, internal 2.5V ref.**	**BiCMOS**	**ADI**	**<3.38**				**1997**	**>80**		**BNL**	**O'Bryan, et al, 98IEEE Wrkshp Rec., pg 39. D/C 9723**
JPL	**AD9260**	**parallel, sigma-delta**	**CMOS**	**ADI**						**7.7**	**2.0E-05**	**TAM**	**Device failed after second latchup.**
JPL	ADS7805		CMOS/epi (7 µm.)	BUB					Dec-94				1.0E-5 @ LET = 15. Incomplete characterization.
SEI	**ADS7809**	**100 KSPS. 100mW max. pwr dissapation. Serial output**	**CMOS**	**BUB**	**17.8**	**9.0E-05**			**Mar-97**	**19.4**	**3.0E-05**	**BNL**	**Layton, et al, 98IEEE Wrkshp Rec., pg 170. D/C 7550 & 9649**
JPL	**ADS-937**	**parallel output, low power**	**CMOS (hybrid)**	**DAT**						**7.7**	**2.0E-04**	**TAM**	**Miyahira, preliminary JPL internal report. All upsets from gate array chip.**
JH/S^3	CS5016		CMOS	CRY					Jan-91				
ARSP	CS5016		CMOS	CRY	10	1.0E-01			May-90				
ARSP	CS5016		CMOS/epi	CRY					May-91				
JPL/GSFC	CS5327	Stereo	CMOS (analog & digital chips)	CRY	3	5.0E-03			Jul-93	9			
ARSP	HS9576RH		CMOS Hybrid	SIP	3	5.0E-04			Jan-92				
ARSP	MAX195		BiCMOS	MXM					1984				

Legend

Manufacturers: ADI - Analog Devices, Inc; BUB - Burr-Brown Corp; DAT - Datel; CRY - Crystal Semiconductor; MXM - Maxim; SEI - Space Electronics, Inc; SIP - Sipex

Test Organizations

ARSP - Aerospace Corp., El Segundo, CA
Ball Aerospace, Colorado Springs, CO
ESA - European Space Agency, Noordwijk, Netherlands
GSFC - Goddard Space Flight Center, Greenbelt, MD
JH - Johns Hopkins Applied Physics Lab, Laurel, MD
JPL - Jet Propulsion Laboratory, Pasadena, CA
S^3 - S-Cubed, San Diego, CA

Radiation Test Facilities

BNL - Tandem Van de Graaff, Brookhaven National Laboratories, Long Island, NY
HIF - Université Catholique de Louvain-la-Neuve, Belgium
TAM - Texas A&M University Cyclotron Institute, College Station, TX