

# HIGH DOSE RADIATION TEST REPORT AD8041S

*December 2021*

Generic

## Radiation Test Report

Product:	AD8041S
Gamma:	0, 100k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	108 Rad(si)/s
Facilities:	VPT RAD
Tested:	9/2/21

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+Isy_Vsy=+-2.5V (A)			-Isy_Vsy=+-2.5V (A)		
	PRE	100k		PRE	100k
SN4	5.24E-03	5.24E-03	SN4	-5.24E-03	-5.24E-03
SN144	5.23E-03	5.23E-03	SN144	-5.23E-03	-5.23E-03
SN1	5.22E-03	5.25E-03	SN1	-5.22E-03	-5.25E-03
SN2	5.15E-03	5.19E-03	SN2	-5.15E-03	-5.19E-03
SN3	5.22E-03	5.26E-03	SN3	-5.22E-03	-5.26E-03
SN14	5.25E-03	5.29E-03	SN14	-5.25E-03	-5.28E-03
SN15	5.22E-03	5.25E-03	SN15	-5.22E-03	-5.25E-03
SN16	5.25E-03	5.29E-03	SN16	-5.25E-03	-5.29E-03
SN17	5.22E-03	5.26E-03	SN17	-5.22E-03	-5.26E-03
SN30	5.26E-03	5.29E-03	SN30	-5.26E-03	-5.29E-03
SN31	5.21E-03	5.25E-03	SN31	-5.21E-03	-5.25E-03
SN32	5.25E-03	5.30E-03	SN32	-5.25E-03	-5.30E-03
SN56	5.23E-03	5.28E-03	SN56	-5.23E-03	-5.27E-03
SN57	5.27E-03	5.32E-03	SN57	-5.27E-03	-5.32E-03
SN58	5.18E-03	5.22E-03	SN58	-5.18E-03	-5.21E-03
SN59	5.25E-03	5.28E-03	SN59	-5.24E-03	-5.28E-03
SN94	5.17E-03	5.21E-03	SN94	-5.17E-03	-5.21E-03
SN95	5.24E-03	5.28E-03	SN95	-5.23E-03	-5.28E-03
SN96	5.22E-03	5.26E-03	SN96	-5.22E-03	-5.25E-03
SN122	5.19E-03	5.23E-03	SN122	-5.19E-03	-5.23E-03
SN123	5.22E-03	5.27E-03	SN123	-5.22E-03	-5.27E-03
SN124	5.10E-03	5.14E-03	SN124	-5.09E-03	-5.14E-03
SN125	5.26E-03	5.31E-03	SN125	-5.26E-03	-5.30E-03
SN126	5.21E-03	5.26E-03	SN126	-5.20E-03	-5.25E-03
SN127	5.22E-03	5.27E-03	SN127	-5.22E-03	-5.27E-03
SN128	5.22E-03	5.26E-03	SN128	-5.22E-03	-5.26E-03
MIN	5.10E-03	5.14E-03	MIN	-5.27E-03	-5.32E-03
MAX	5.27E-03	5.32E-03	MAX	-5.09E-03	-5.14E-03
MEAN	5.22E-03	5.26E-03	MEAN	-5.22E-03	-5.26E-03
STD DEV. ( $\sigma$ )	3.96E-05	3.98E-05	STD DEV. ( $\sigma$ )	3.96E-05	3.98E-05
LIM HI	6.10E-03	6.10E-03	LIM HI	0.00	0.00
LIM LO	0.00	0.00	LIM LO	-6.10E-03	-6.10E-03
MEAN+3( $\sigma$ )	5.34E-03	5.38E-03	MEAN+3( $\sigma$ )	-5.10E-03	-5.14E-03
MEAN-3( $\sigma$ )	5.10E-03	5.14E-03	MEAN-3( $\sigma$ )	-5.34E-03	-5.38E-03

+Isy_Vsy=+-2.5V_Disable (A)			-Isy_Vsy=+-2.5V_Disable (A)		
	PRE	100k		PRE	100k
SN4	1.43E-03	1.43E-03	SN4	-1.26E-03	-1.26E-03
SN144	1.42E-03	1.42E-03	SN144	-1.25E-03	-1.25E-03
SN1	1.46E-03	1.46E-03	SN1	-1.28E-03	-1.29E-03
SN2	1.43E-03	1.44E-03	SN2	-1.25E-03	-1.26E-03
SN3	1.44E-03	1.45E-03	SN3	-1.26E-03	-1.27E-03
SN14	1.43E-03	1.44E-03	SN14	-1.26E-03	-1.26E-03
SN15	1.44E-03	1.44E-03	SN15	-1.26E-03	-1.26E-03
SN16	1.46E-03	1.46E-03	SN16	-1.28E-03	-1.28E-03
SN17	1.46E-03	1.46E-03	SN17	-1.28E-03	-1.28E-03
SN30	1.42E-03	1.42E-03	SN30	-1.25E-03	-1.25E-03
SN31	1.42E-03	1.42E-03	SN31	-1.25E-03	-1.25E-03
SN32	1.41E-03	1.42E-03	SN32	-1.25E-03	-1.25E-03
SN56	1.45E-03	1.45E-03	SN56	-1.27E-03	-1.27E-03
SN57	1.44E-03	1.45E-03	SN57	-1.27E-03	-1.27E-03
SN58	1.45E-03	1.45E-03	SN58	-1.27E-03	-1.27E-03
SN59	1.43E-03	1.44E-03	SN59	-1.26E-03	-1.26E-03
SN94	1.43E-03	1.43E-03	SN94	-1.25E-03	-1.26E-03
SN95	1.45E-03	1.46E-03	SN95	-1.28E-03	-1.28E-03
SN96	1.42E-03	1.43E-03	SN96	-1.25E-03	-1.26E-03
SN122	1.41E-03	1.41E-03	SN122	-1.24E-03	-1.24E-03
SN123	1.42E-03	1.43E-03	SN123	-1.25E-03	-1.26E-03
SN124	1.41E-03	1.41E-03	SN124	-1.24E-03	-1.24E-03
SN125	1.41E-03	1.42E-03	SN125	-1.25E-03	-1.25E-03
SN126	1.42E-03	1.42E-03	SN126	-1.25E-03	-1.25E-03
SN127	1.43E-03	1.43E-03	SN127	-1.26E-03	-1.26E-03
SN128	1.42E-03	1.42E-03	SN128	-1.25E-03	-1.25E-03
MIN	1.41E-03	1.41E-03	MIN	-1.28E-03	-1.29E-03
MAX	1.46E-03	1.46E-03	MAX	-1.24E-03	-1.24E-03
MEAN	1.43E-03	1.44E-03	MEAN	-1.26E-03	-1.26E-03
STD DEV. ( $\sigma$ )	1.56E-05	1.63E-05	STD DEV. ( $\sigma$ )	1.22E-05	1.29E-05
LIM HI	1.70E-03	1.70E-03	LIM HI	0.00	0.00
LIM LO	0.00	0.00	LIM LO	-1.70E-03	-1.70E-03
MEAN+3( $\sigma$ )	1.48E-03	1.48E-03	MEAN+3( $\sigma$ )	-1.22E-03	-1.22E-03
MEAN-3( $\sigma$ )	1.38E-03	1.39E-03	MEAN-3( $\sigma$ )	-1.30E-03	-1.30E-03

Voh_Vsy=+-2.5V_RL=1k (V)			Voh_Vsy=+-2.5V_RL=50Ohms (V)		
	PRE	100k		PRE	100k
SN4	2.455	2.454	SN4	2.454	2.454
SN144	2.454	2.454	SN144	2.454	2.454
SN1	2.454	2.459	SN1	2.454	2.459
SN2	2.455	2.460	SN2	2.455	2.460
SN3	2.454	2.460	SN3	2.454	2.460
SN14	2.457	2.462	SN14	2.457	2.462
SN15	2.455	2.460	SN15	2.455	2.460
SN16	2.454	2.460	SN16	2.454	2.460
SN17	2.455	2.461	SN17	2.455	2.461
SN30	2.454	2.459	SN30	2.454	2.459
SN31	2.455	2.461	SN31	2.455	2.461
SN32	2.454	2.460	SN32	2.454	2.460
SN56	2.453	2.459	SN56	2.453	2.459
SN57	2.454	2.460	SN57	2.454	2.460
SN58	2.454	2.459	SN58	2.454	2.459
SN59	2.454	2.460	SN59	2.454	2.460
SN94	2.455	2.461	SN94	2.455	2.461
SN95	2.455	2.460	SN95	2.455	2.460
SN96	2.455	2.460	SN96	2.455	2.460
SN122	2.455	2.461	SN122	2.455	2.461
SN123	2.455	2.460	SN123	2.455	2.460
SN124	2.456	2.461	SN124	2.456	2.461
SN125	2.454	2.459	SN125	2.454	2.459
SN126	2.453	2.459	SN126	2.453	2.458
SN127	2.453	2.459	SN127	2.453	2.459
SN128	2.453	2.459	SN128	2.453	2.459
MIN	2.453	2.459	MIN	2.453	2.458
MAX	2.457	2.462	MAX	2.457	2.462
MEAN	2.454	2.460	MEAN	2.454	2.460
STD DEV. ( $\sigma$ )	9.03E-04	7.92E-04	STD DEV. ( $\sigma$ )	9.15E-04	8.02E-04
LIM HI	2.50	2.50	LIM HI	2.50	2.50
LIM LO	1.75	1.75	LIM LO	1.45	1.45
MEAN+3( $\sigma$ )	2.457	2.462	MEAN+3( $\sigma$ )	2.457	2.462
MEAN-3( $\sigma$ )	2.452	2.458	MEAN-3( $\sigma$ )	2.452	2.458

Vol_Vsy=+-2.5V_RL=1k (V)			Vol_Vsy=+-2.5V_RL=50Ohms (V)		
	PRE	100k		PRE	100k
SN4	-2.460	-2.460	SN4	-2.460	-2.460
SN144	-2.460	-2.460	SN144	-2.460	-2.460
SN1	-2.460	-2.455	SN1	-2.460	-2.455
SN2	-2.461	-2.455	SN2	-2.461	-2.455
SN3	-2.461	-2.455	SN3	-2.461	-2.455
SN14	-2.462	-2.457	SN14	-2.462	-2.457
SN15	-2.462	-2.456	SN15	-2.462	-2.456
SN16	-2.461	-2.455	SN16	-2.461	-2.455
SN17	-2.462	-2.456	SN17	-2.462	-2.456
SN30	-2.460	-2.456	SN30	-2.460	-2.456
SN31	-2.460	-2.455	SN31	-2.460	-2.455
SN32	-2.460	-2.455	SN32	-2.460	-2.455
SN56	-2.460	-2.455	SN56	-2.460	-2.455
SN57	-2.461	-2.455	SN57	-2.461	-2.455
SN58	-2.461	-2.456	SN58	-2.461	-2.456
SN59	-2.460	-2.455	SN59	-2.460	-2.455
SN94	-2.461	-2.455	SN94	-2.461	-2.455
SN95	-2.460	-2.455	SN95	-2.460	-2.455
SN96	-2.462	-2.456	SN96	-2.462	-2.456
SN122	-2.461	-2.456	SN122	-2.461	-2.456
SN123	-2.461	-2.455	SN123	-2.461	-2.455
SN124	-2.462	-2.456	SN124	-2.462	-2.456
SN125	-2.461	-2.456	SN125	-2.461	-2.456
SN126	-2.460	-2.454	SN126	-2.460	-2.454
SN127	-2.460	-2.455	SN127	-2.460	-2.455
SN128	-2.460	-2.454	SN128	-2.460	-2.455
MIN	-2.46	-2.46	MIN	-2.46	-2.46
MAX	-2.46	-2.45	MAX	-2.46	-2.45
MEAN	-2.46	-2.46	MEAN	-2.46	-2.46
STD DEV. ( $\sigma$ )	5.80E-04	6.15E-04	STD DEV. ( $\sigma$ )	5.82E-04	6.13E-04
LIM HI	-1.75	-1.75	LIM HI	-1.45	-1.45
LIM LO	-2.50	-2.50	LIM LO	-2.50	-2.50
MEAN+3( $\sigma$ )	-2.46	-2.45	MEAN+3( $\sigma$ )	-2.46	-2.45
MEAN-3( $\sigma$ )	-2.46	-2.46	MEAN-3( $\sigma$ )	-2.46	-2.46

Vos_Vsy=+-2.5V (V)			+Ibias_Vsy=+-2.5V_Vcm=0 (A)		
	PRE	100k		PRE	100k
SN4	3.37E-03	3.37E-03	SN4	-1.23E-06	-1.22E-06
SN144	5.26E-03	5.26E-03	SN144	-1.22E-06	-1.22E-06
SN1	2.88E-03	2.97E-03	SN1	-1.20E-06	-1.25E-06
SN2	3.74E-03	3.86E-03	SN2	-1.20E-06	-1.25E-06
SN3	1.83E-03	1.97E-03	SN3	-1.22E-06	-1.28E-06
SN14	1.56E-03	1.61E-03	SN14	-1.28E-06	-1.35E-06
SN15	5.12E-03	5.19E-03	SN15	-1.23E-06	-1.29E-06
SN16	4.79E-03	4.90E-03	SN16	-1.24E-06	-1.31E-06
SN17	2.31E-03	2.41E-03	SN17	-1.23E-06	-1.30E-06
SN30	2.45E-03	2.50E-03	SN30	-1.30E-06	-1.37E-06
SN31	3.83E-03	3.90E-03	SN31	-1.29E-06	-1.36E-06
SN32	2.37E-03	2.41E-03	SN32	-1.25E-06	-1.33E-06
SN56	4.55E-03	4.54E-03	SN56	-1.20E-06	-1.28E-06
SN57	2.98E-03	2.98E-03	SN57	-1.30E-06	-1.37E-06
SN58	4.13E-03	4.22E-03	SN58	-1.19E-06	-1.26E-06
SN59	1.59E-03	1.64E-03	SN59	-1.28E-06	-1.37E-06
SN94	2.62E-03	2.67E-03	SN94	-1.25E-06	-1.32E-06
SN95	2.69E-03	2.73E-03	SN95	-1.28E-06	-1.35E-06
SN96	5.27E-03	5.36E-03	SN96	-1.25E-06	-1.31E-06
SN122	4.06E-03	4.08E-03	SN122	-1.24E-06	-1.30E-06
SN123	-6.22E-04	-5.53E-04	SN123	-1.24E-06	-1.25E-06
SN124	2.22E-03	2.25E-03	SN124	-1.23E-06	-1.29E-06
SN125	3.75E-03	3.73E-03	SN125	-1.23E-06	-1.30E-06
SN126	3.53E-04	3.74E-04	SN126	-1.18E-06	-1.26E-06
SN127	4.56E-03	4.62E-03	SN127	-1.18E-06	-1.25E-06
SN128	2.80E-03	2.84E-03	SN128	-1.18E-06	-1.25E-06
MIN	-6.22E-04	-5.53E-04	MIN	-1.30E-06	-1.37E-06
MAX	5.27E-03	5.36E-03	MAX	-1.18E-06	-1.25E-06
MEAN	2.99E-03	3.05E-03	MEAN	-1.24E-06	-1.30E-06
STD DEV. ( $\sigma$ )	1.47E-03	1.47E-03	STD DEV. ( $\sigma$ )	3.82E-08	4.26E-08
LIM HI	9.50E-03	9.50E-03	LIM HI	3.40E-06	3.40E-06
LIM LO	-9.50E-03	-9.50E-03	LIM LO	-3.40E-06	-3.40E-06
MEAN+3( $\sigma$ )	7.40E-03	7.46E-03	MEAN+3( $\sigma$ )	-1.12E-06	-1.17E-06
MEAN-3( $\sigma$ )	-1.41E-03	-1.36E-03	MEAN-3( $\sigma$ )	-1.35E-06	-1.43E-06

<b>-Ibias_Vsy=+-2.5V_Vcm=0 (A)</b>			<b>IOffset_Vsy=+-2.5V (A)</b>		
	PRE	100k		PRE	100k
SN4	-9.21E-07	-9.21E-07	SN4	-3.05E-07	-3.03E-07
SN144	-7.33E-07	-7.33E-07	SN144	-4.84E-07	-4.82E-07
SN1	-9.71E-07	-9.62E-07	SN1	-2.28E-07	-2.90E-07
SN2	-8.86E-07	-8.73E-07	SN2	-3.10E-07	-3.77E-07
SN3	-1.08E-06	-1.06E-06	SN3	-1.40E-07	-2.15E-07
SN14	-1.10E-06	-1.10E-06	SN14	-1.74E-07	-2.55E-07
SN15	-7.48E-07	-7.41E-07	SN15	-4.84E-07	-5.48E-07
SN16	-7.82E-07	-7.71E-07	SN16	-4.61E-07	-5.39E-07
SN17	-1.03E-06	-1.02E-06	SN17	-2.03E-07	-2.80E-07
SN30	-1.02E-06	-1.01E-06	SN30	-2.84E-07	-3.56E-07
SN31	-8.78E-07	-8.71E-07	SN31	-4.12E-07	-4.93E-07
SN32	-1.02E-06	-1.02E-06	SN32	-2.30E-07	-3.08E-07
SN56	-8.06E-07	-8.07E-07	SN56	-3.98E-07	-4.78E-07
SN57	-9.62E-07	-9.63E-07	SN57	-3.37E-07	-4.05E-07
SN58	-8.48E-07	-8.39E-07	SN58	-3.44E-07	-4.20E-07
SN59	-1.10E-06	-1.10E-06	SN59	-1.79E-07	-2.69E-07
SN94	-9.99E-07	-9.94E-07	SN94	-2.49E-07	-3.23E-07
SN95	-9.91E-07	-9.88E-07	SN95	-2.92E-07	-3.66E-07
SN96	-7.33E-07	-7.25E-07	SN96	-5.20E-07	-5.85E-07
SN122	-8.54E-07	-8.53E-07	SN122	-3.83E-07	-4.51E-07
SN123	-1.25E-06	-1.32E-06	SN123	1.08E-08	6.49E-08
SN124	-1.04E-06	-1.04E-06	SN124	-1.89E-07	-2.50E-07
SN125	-8.84E-07	-8.87E-07	SN125	-3.42E-07	-4.09E-07
SN126	-1.19E-06	-1.22E-06	SN126	9.90E-09	-3.51E-08
SN127	-8.04E-07	-7.99E-07	SN127	-3.78E-07	-4.48E-07
SN128	-9.80E-07	-9.78E-07	SN128	-1.95E-07	-2.68E-07
MIN	-1.25E-06	-1.32E-06	MIN	-5.20E-07	-5.85E-07
MAX	-7.33E-07	-7.25E-07	MAX	1.08E-08	6.49E-08
MEAN	-9.57E-07	-9.56E-07	MEAN	-2.80E-07	-3.46E-07
STD DEV. ( $\sigma$ )	1.37E-07	1.47E-07	STD DEV. ( $\sigma$ )	1.37E-07	1.52E-07
LIM HI	3.40E-06	3.40E-06	LIM HI	7.00E-07	7.00E-07
LIM LO	-3.40E-06	-3.40E-06	LIM LO	-7.00E-07	-7.00E-07
MEAN+3( $\sigma$ )	-5.44E-07	-5.15E-07	MEAN+3( $\sigma$ )	1.32E-07	1.10E-07
MEAN-3( $\sigma$ )	-1.37E-06	-1.40E-06	MEAN-3( $\sigma$ )	-6.91E-07	-8.02E-07

CMRR_Vsy2.5_Vcm=1V to 2.5V (dB)			PSRR_Vsy=+-5_Vsy=+-2.5 (dB)		
	PRE	100k		PRE	100k
SN4	79.8	79.8	SN4	88.3	88.2
SN144	87.3	87.2	SN144	84.5	84.5
SN1	81.4	81.5	SN1	87.5	87.6
SN2	86.7	87.3	SN2	86.5	86.5
SN3	80.0	79.9	SN3	92.5	92.6
SN14	82.9	82.9	SN14	93.3	94.0
SN15	86.7	87.0	SN15	84.7	84.6
SN16	82.8	82.6	SN16	84.8	85.1
SN17	87.8	87.9	SN17	92.5	93.1
SN30	85.4	85.5	SN30	93.2	93.4
SN31	84.2	84.4	SN31	87.5	87.7
SN32	90.0	90.3	SN32	91.9	92.2
SN56	84.1	84.1	SN56	84.1	83.9
SN57	90.9	91.0	SN57	90.2	90.2
SN58	82.3	82.6	SN58	85.3	85.5
SN59	81.3	81.5	SN59	94.0	94.3
SN94	83.1	83.1	SN94	89.5	89.6
SN95	80.9	80.9	SN95	91.7	91.7
SN96	87.0	87.4	SN96	85.5	85.7
SN122	82.8	82.9	SN122	87.3	87.1
SN123	86.8	87.3	SN123	102	100
SN124	85.9	85.9	SN124	90.8	90.9
SN125	83.6	83.6	SN125	87.7	87.5
SN126	86.3	86.3	SN126	117	119
SN127	81.1	81.3	SN127	84.1	84.2
SN128	83.4	83.5	SN128	88.3	88.3
MIN	80.0	79.9	MIN	84.1	83.9
MAX	90.9	91.0	MAX	117	119
MEAN	84.5	84.6	MEAN	90.5	90.6
STD DEV. ( $\sigma$ )	2.89	2.97	STD DEV. ( $\sigma$ )	7.05	7.24
LIM HI	300	300	LIM HI	300	300
LIM LO	70.0	70.0	LIM LO	68.0	68.0
MEAN+3( $\sigma$ )	93.1	93.5	MEAN+3( $\sigma$ )	112	112
MEAN-3( $\sigma$ )	75.8	75.7	MEAN-3( $\sigma$ )	69.3	68.9



Avo_Vsy2.5_Vout+-2_RL=1K (kV/V)		
	PRE	100k
SN4	383	401
SN144	377	388
SN1	408	347
SN2	377	351
SN3	401	248
SN14	349	371
SN15	470	429
SN16	406	407
SN17	453	485
SN30	403	372
SN31	408	342
SN32	396	230
SN56	397	491
SN57	401	239
SN58	385	404
SN59	366	478
SN94	472	482
SN95	372	225
SN96	400	411
SN122	389	282
SN123	348	285
SN124	423	400
SN125	425	598
SN126	355	248
SN127	428	261
SN128	392	326
MIN	348	225
MAX	472	598
MEAN	401	363
STD DEV. ( $\sigma$ )	33.2	99.9
LIM HI	9999	9999
LIM LO	15.0	15.0
MEAN+3( $\sigma$ )	501	663
MEAN-3( $\sigma$ )	301	63.2



