

femb id 56 faild the assembly checkout

PART 01 INPUT INFORMATION

Operator	env	Toy_TPC	Note	FEMB ID	date
123	RT	100pF	Debug FEMB QC RT	{'femb0': '456'}	08_11_2025_01_10_04

Configuration:

14 mV/fC; 2 μ s; 200 mV; SE, DIFF;

Here is the issue:
{'PED 128-CH std': 876.6328125, 'RMS 128-CH std': 67.25, 'baseline err_status': [], [], 'RMS err_status':
[[15, 112], [0, 7]], 'Result': False}

PART 02 Initial Test < Pass >

2.1 Initial Current Measurement

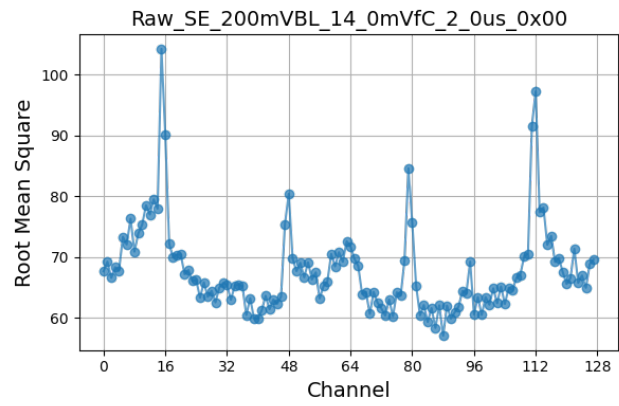
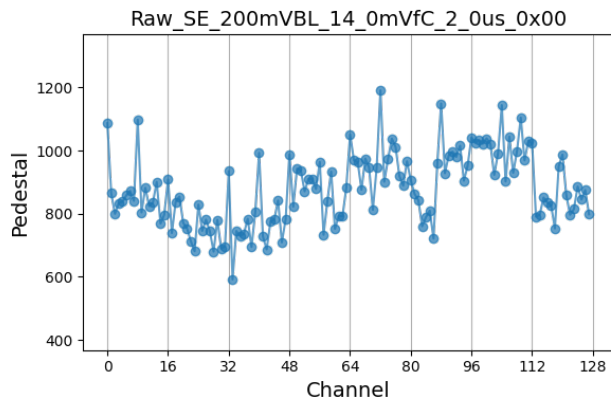
Initial Current Measurement	CH0	CH1	CH2	CH3
name	BIAS	LArASIC	ColdDATA	ColdADC
V_set/V	5.000	3.000	3.000	3.500
V_meas/V	5.0	2.946	2.965	3.42
I_meas/A	0.0	0.443	0.232	1.556
P_meas/W	0.0	1.305	0.688	5.322
Total Power	7.3149999999999995			

2.2 Check FEMB Registers

COLDATA_REG_1	ColdADC_REG_1	COLDATA_REG_2	Result	ColdADC_REG_2
Pass	Pass	Pass	True	Pass

PART 03 SE Interface Measurement | Fail

3.1 No Buffer RMS at 200mV, 14mV/fC, 2us, DAC = 0x00



SE Noise Measurement	VALUE
PED 128-CH std	876.6328125
RMS 128-CH std	67.25
baseline err_status	[[], []]
RMS err_status	[[15, 112], [0, 7]]
Result	False

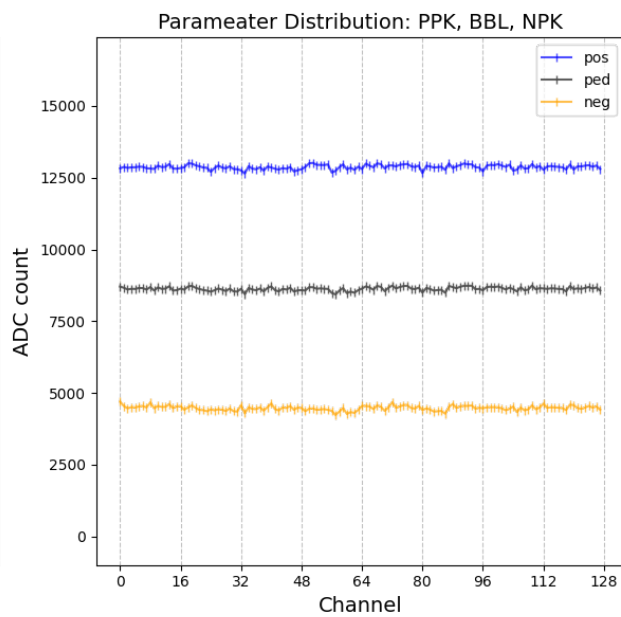
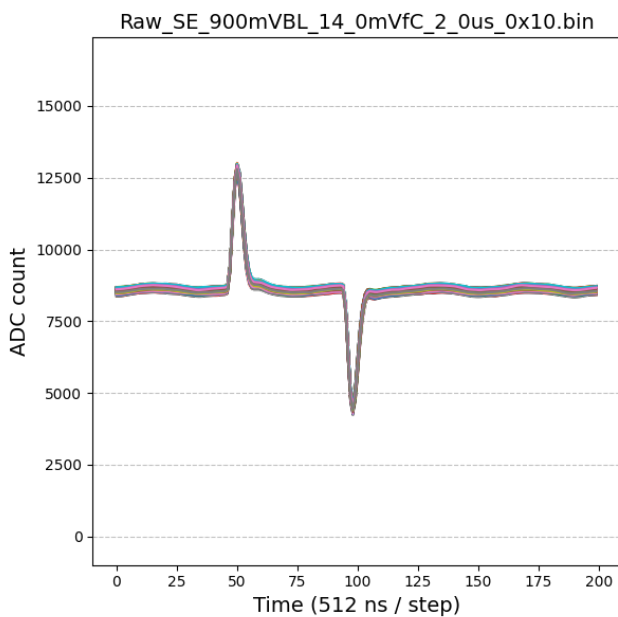
3.2 No Buffer interface Current Measurement

SE Current Measurement	CH0	CH1	CH2	CH3
name	BIAS	LArASIC	ColdDATA	ColdADC
V_set/V	5.000	3.000	3.000	3.500
V_meas/V	5.0	2.947	2.964	3.419
I_meas/A	0.0	0.43	0.232	1.587
P_meas/W	0.0	1.267	0.688	5.426
Total Power	7.381			

3.3 No Buffer Interface power rail

CDVDDA	CDVDDIO	ADCRVDDD1P2	ADCLVDDD1P2	FERVDDP	FELVDDP	ADCRP25V	ADCLP25V	GND
1188	2228	1097	1094	1788	1794	2246	2245	25

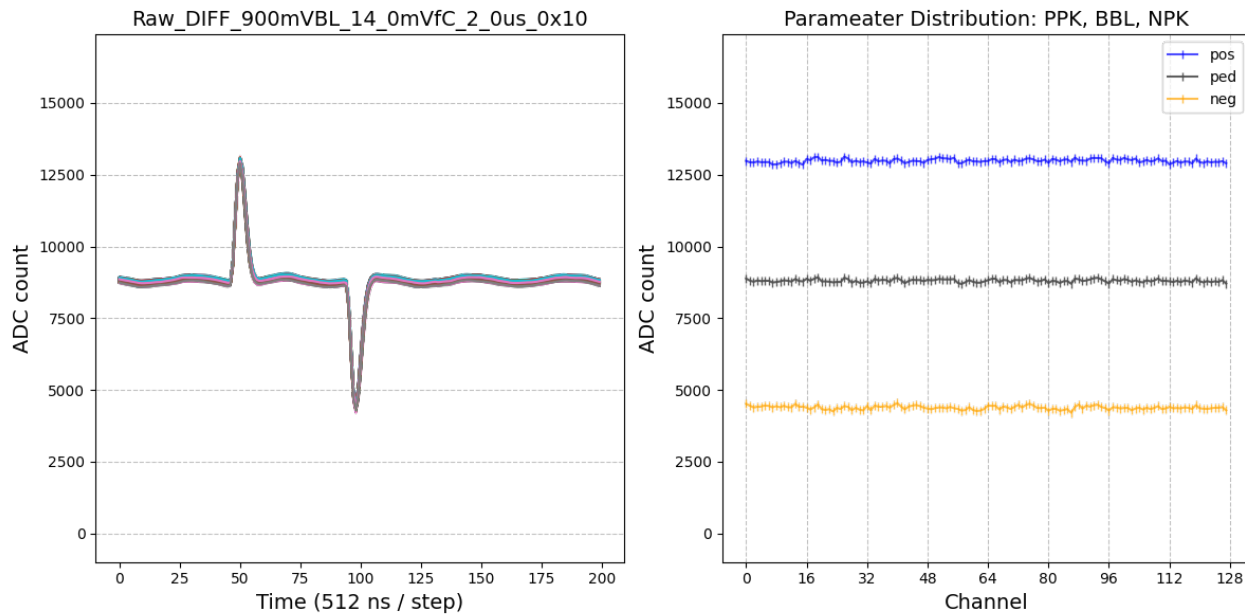
3.4 No Buffer Interface Pulse at 900mV 14mV/fC 2us



SE Pulse Response	VALUE
Result	True

PART 04 DIFF Interface Measurement < Pass >

4.1 DIFF Pulse Measurement at 900mV, 14mV/fC, 2us



4.1 DIFF Pulse Measurement	VALUE
Result	True

4.2 SEDC interface Current Measurement

4.2 DIFF Current Measurement	CH0	CH1	CH2	CH3
name	BIAS	LArASIC	ColdDATA	ColdADC
V_set/V	5.000	3.000	3.000	3.500
V_meas/V	5.0	2.903	2.963	3.418
I_meas/A	0.0	0.684	0.226	1.556
P_meas/W	0.0	1.986	0.67	5.318
Total Power	7.974			

4.3 DIFF Power Rail

CDVDDA	CDVDDIO	ADCRVDDD1P2	ADCLVDDD1P2	FERVDDP	FELVDDP	ADCRP25V	ADCLP25V	GND
1189	2228	1095	1094	1660	1664	2244	2245	28

PART 05 Monitoring Path Measurement < Pass >

5 Monitoring Path

Monitor Path	CH0	CH1	CH2	CH3	CH4	CH5	CH6	CH7
ASIC #	0	1	2	3	4	5	6	7
FE T	859.5	869.4	859.3	853.0	869.7	868.1	867.5	862.7
FE BGP	1172.7	1177.4	1172.1	1174.2	1180.3	1182.8	1175.0	1184.2
ADC_VCM1	900.2	899.0	904.8	899.7	903.9	899.6	899.0	905.5
ADC_VCM0	1185.2	1188.9	1186.4	1189.8	1190.6	1187.1	1187.5	1186.9

ADC_VREFP	1906.4	1900.7	1899.5	1906.7	1903.6	1904.5	1907.9	1906.8
ADC_VREFN	461.7	470.2	471.0	470.4	465.8	469.9	468.8	467.5
VSSA	33.8	36.4	33.0	35.6	37.0	37.8	36.8	34.3