

Lot 6

AE = 2266-1
E = 2113-3

WIREBONDS STATUS													
dE				E-front				E-back				Last checked	
strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd	date	detector
1				1				1				10/1/07	dE, E _f , E _b
2			X	2				2					
3				3				3					
4				4				4					
5				5				5					
6				6				6					
7				7				7					
8				8				8					
9				9				9					
10				10				10					
11				11				11					
12				12				12					
13				13				13					
14				14				14					
15				15				15					
16				16				16					
17				17				17		/			
18				18				18			/		
19				19				19					
20				20				20					
21				21				21					
22				22				22					
23				23				23					
24				24				24	/				
25	~	~	~	25				25					
26	~	~	~	26				26	+				
27	~	~	~	27				27	+	/			
28				28				28					
29				29				29					
30				30				30					
31				31				31					
32				32				32					

*almost shorted to GR

Legend:
 X = bond missing / = bond broken ~ = bond damaged

Paradek Profile

BB7-1500

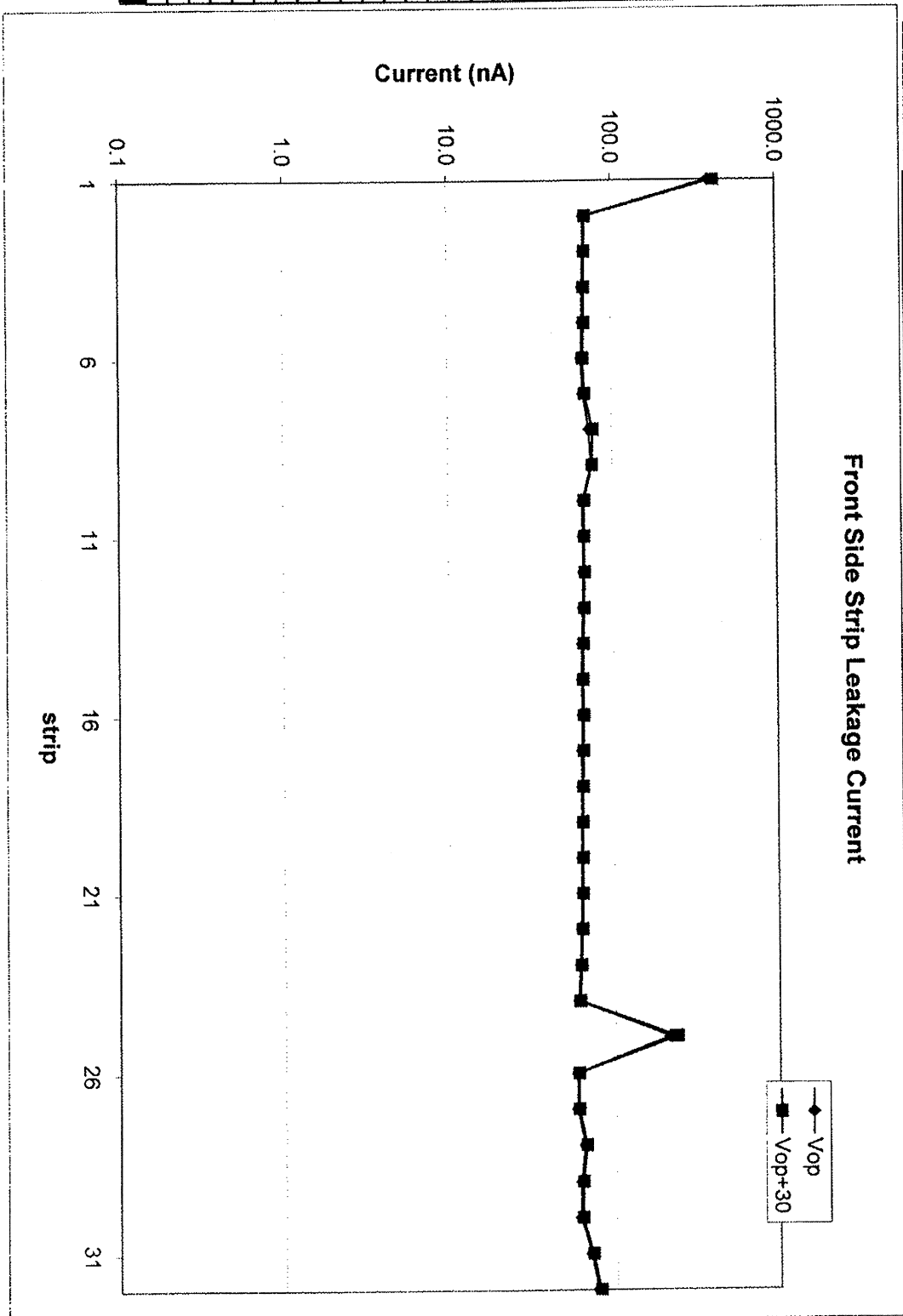
Wafer No.: 2113-3

Thickness: 1471 μm Vop

380 Volts

Front Side Data

Σ Current(nA)	Vop	Vop+30
1	390.6	422.2
2	67.4	68.72
3	67	68.08
4	66	67.13
5	66	67.19
6	64.8	65.93
7	66.2	67.55
8	71.9	76.01
9	74.1	75.15
10	65.2	66.46
11	65.1	66.29
12	65.6	66.68
13	64.9	66
14	63.8	64.8
15	63.1	64.47
16	63.9	64.86
17	63.3	64.26
18	63	63.96
19	62.8	63.4
20	62.2	63.17
21	62.3	63.24
22	61.5	62.41
23	60.5	61.44
24	59.1	59.97
25	21.3	23.46
26	57.8	58.76
27	57.6	58.69
28	63.7	65.35
29	60.5	62
30	59.8	61.29
31	69.4	71.4
32	76.6	79.25
total	2538.7	2630.71



HIGH LEAKAGE CURRENT RESULT DUE TO HIGHER ROOM TEMPERATURE AND HUMIDITY. (See Alpha resolution for current result in vacuum.)

ROOM TEMPERATURE = 25°C

HUMIDITY = 55%

Resolution Plot

HIRA BB7-1500

Wafer No.: **2113-3**

Thickness: **1474** μm

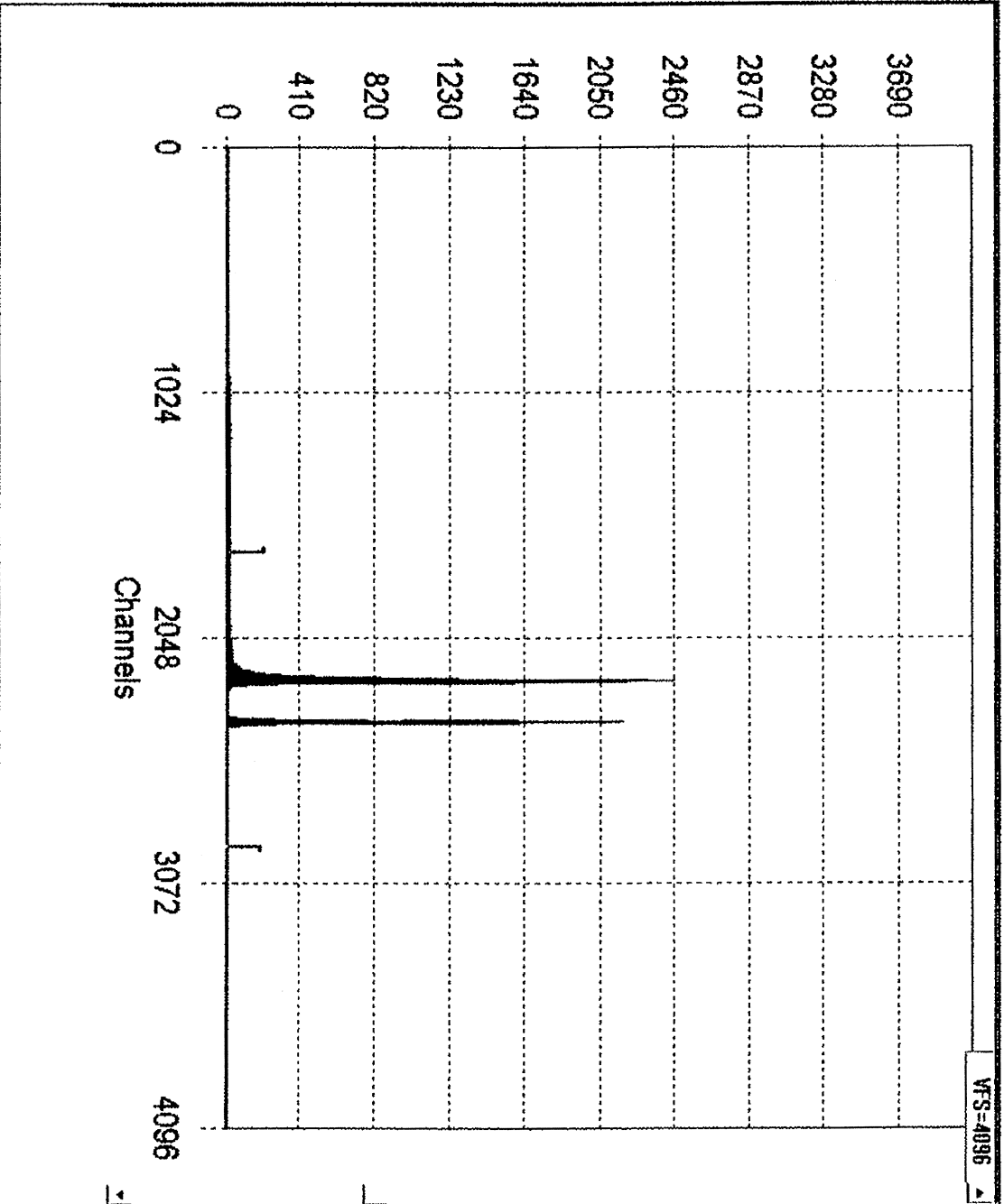
VFS-4096

UNCTION

DET LINE: **51** KeV
SYSTEM: **39.1** KeV
CAL: **32.7** KeV

PHMIC

DET LINE: **51.7** KeV
SYSTEM: **38.6** KeV
CALC: **34.4** KeV



BIAS VOLTS=

380 V

Leakage

1500 nA

Source
Am 241

Rise Time
1

Flat Top
0

INDIANA UNIVERSITY

BACK RESISTANCE MEASUREMENT:

DATE: 14/07/03
 DEVICE TYPE: HIRA B7-D/S-1500
 DEVICE NUMBER: 2113-3
 THICKNESS: 1471 μ M
 OPERATING VOLTAGE: 380V

CHANNEL	OV	V.OP	V.OP + 30V
1-2	1.8K Ω	159K Ω	>2M Ω
2-3	1.9K Ω	>1M Ω	>2M Ω
3-4	1.9K Ω	1788K Ω	>2M Ω
4-5	1.9K Ω	>1M Ω	>2M Ω
5-6	1.9K Ω	>1M Ω	>2M Ω
6-7	1.9K Ω	186K Ω	>2M Ω
7-8	1.9K Ω	101K Ω	>2M Ω
8-9	1.9K Ω	118K Ω	>2M Ω
9-10	1.9K Ω	356K Ω	>2M Ω
10-11	1.7K Ω	101K Ω	>2M Ω
11-12	1.6K Ω	125K Ω	>2M Ω
12-13	1.6K Ω	177K Ω	>2M Ω
13-14	1.6K Ω	>1M Ω	>2M Ω
14-15	1.6K Ω	>1M Ω	>2M Ω
15-16	1.6K Ω	174K Ω	>2M Ω
16-17	1.6K Ω	>1M Ω	>2M Ω
17-18	1.6K Ω	>1M Ω	>2M Ω
18-19	1.6K Ω	>1M Ω	>2M Ω
19-20	1.6K Ω	>1M Ω	>2M Ω
20-21	1.6K Ω	>1M Ω	>2M Ω
21-22	1.7K Ω	>1M Ω	>2M Ω
22-23	1.7K Ω	>1M Ω	>2M Ω
23-24	1.8K Ω	>1M Ω	>2M Ω
24-25	1.8K Ω	>1M Ω	>2M Ω
25-26	2.1K Ω	>1M Ω	>2M Ω
26-27	1.8K Ω	279K Ω	>2M Ω
27-28	1.9K Ω	>1M Ω	>2M Ω
28-29	1.9K Ω	>1M Ω	>2M Ω
29-30	1.8K Ω	>1M Ω	>2M Ω
30-31	1.8K Ω	>1M Ω	>2M Ω
31-32	1.8K Ω	>1M Ω	>2M Ω

Si-detector Inspection Record

Date: 10/1/2007

Time: ~ 5:00 PM

Tel n.: 6

Inspected detector(s): dE + E (p+b); dE removed

1st inspector: Vlad HENZI

2nd inspector: PAMELA HENZILOVA

WIREBONDS STATUS

dE 2266-1				E-front 2113-3				E-back 2113-3			
strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd
1				1				1			
2			X	2				2			
3				3				3			
4				4				4			
5				5				5			
6				6				6			
7				7				7			
8				8				8			
9				9				9			
10				10				10			
11				11				11			
12				12				12			
13				13				13			
14				14				14			
15				15				15			
16				16				16			
17				17				17		/	
18				18				18			/
19				19				19			
20				20				20			
21				21				21			
22				22				22			
23				23				23			
24				24				24	/		
25	~	~	~*	25				25			
26	~*	~	~	26				26	#		
27	~	~	~	27				27	#	/	
28				28				28			
29				29				29			
30				30				30			
31				31				31			
32				32				32			

Legend: * almost shorting to GR

X = bond missing

/ = bond broken

~ = bond damaged

Overall detector status:

(e.g. dusty surface, scratches, dirty frame and/or cable, status of telescope can ...)

E₊ bonds very good

scratch between strips 26 and 27 on E_b

E₊ surface between strips 25 and 30 coated with foggy layer - probably oil deposit

Noise tests of detector n.: 2113-3 in telescope n.: 6

		Date	8-31-07	10-31-07													
		electronics	CLASSIC	CHIP													
E back	Chip 0 or shaper 0	chn 0	~4.5mV	~32mV													
		1	4.5	~41													
		2	4.5	41													
		3	4.5	41													
		4	4.5	41													
		5	4.5	41													
		6	4.5	41													
		7	4.5	41													
		8	4.5	41													
		9	4.5	41													
		10	4.5	~43mV													
		11	4.5	41													
		12	4.5	41													
		13	4.5	41													
		14	4.5	41													
	15	~9mV	41														
	E front	Chip 1 or shaper 1	chn 0	~6mV	41												
			1	4.5	41												
			2	4.5	41												
			3	4.5	41												
			4	4.5	41												
			5	4.5	41												
			6	4.5	41												
			7	4.5	41												
			8	4.5	41												
			9	4.5	41												
			10	4.5	41												
			11	4.5	41												
			12	4.5	41												
			13	4.5	41												
14			4.5	41													
15		4.5	~55mV														
E front		Chip 0 or shaper 2	chn 0	5.5	±35mV												
			1	12mV	35												
			2	~5.5	35												
			3	5.5	35												
			4	5.5	35												
			5	5.5	35												
			6	5.5	35												
			7	5.5	35												
			8	5.5	35												
			9	5.5	35												
			10	5.5	35												
			11	5.5	35												
			12	5.5	35												
			13	5.5	35												
	14		5.5	~500mV													
	15	17mV	35														
	E front	Chip 1 or shaper 3	chn 0	~5	35												
			1	5	35												
			2	5	35												
			3	~18mV	35												
			4	5	35												
			5	~15mV	35												
			6	5	35												
			7	5	35												
			8	5	35												
			9	5	35												
			10	5	~240mV												
			11	5	35												
			12	5	~290mV												
			13	5	35												
14			5	35													
15		~8mV	35														

↓
after 1st
part of
0.533 cps

Si-detector Inspection Record

Date: 10/8/2007 **Time:** 7:00pm **Tel n.:** 6
Inspected detector(s): dE+E_F
Detector number(s): 2266-1 +
What occasion : installing dE
1st inspector: Ulad HENZL
2nd inspector: Daniela HENZLOVA

WIREBONDS STATUS

dE				E-front				E-back			
strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd
1				1				1			
2			X	2				2			
3				3				3			
4				4				4			
5				5			~	5			
6				6				6			
7				7				7			
8				8	~	~	~	8			
9				9				9			
10				10				10			
11				11				11			
12				12				12			
13				13				13			
14				14				14			
15				15				15			
16				16				16			
17				17				17			
18				18				18			
19				19				19			
20				20				20			
21				21				21			
22				22				22			
23				23				23			
24				24				24			
25	~	~	~	25				25			
26	~	~	~	26				26			
27	~	~	~	27				27			
28				28				28			
29				29				29			
30				30				30			
31				31				31			
32				32				32			

Legend:

X = bond missing / = bond broken ~ = bond damaged

Overall detector status:

(e.g. dusty surface, scratches, dirty frame and/or cable, status of telescope can ...)

dE+E_F surface cleaned with dry N₂
E_F between strips 21-32 foggy surface

Si-detector Inspection Record

Date: 10/12/2007 Time: 7:30 pm Tel n.: 6

Inspected detector(s): dE + E_F

Detector number(s): 2266-1 + 2113-3

What occasion: removing dE

1st inspector: Urad HENZL

2nd inspector: Jana HENZLOVA

WIREBONDS STATUS

dE				E-front				E-back			
strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd
1				1				1			
2			X	2				2			
3			X	3				3			
4				4				4			
5				5			~	5			
6				6				6			
7				7				7			
8				8	X		~	8			
9				9				9			
10				10				10			
11				11				11			
12				12				12			
13				13				13			
14				14				14			
15				15				15			
16				16				16			
17				17				17			
18				18				18			
19				19				19			
20				20				20			
21				21				21			
22				22				22			
23				23	~			23			
24				24				24			
25	~	~	~	25				25			
26	~	~	~	26				26			
27	~	~	~	27				27			
28				28				28			
29				29				29			
30				30				30			
31				31				31			
32				32				32			

Legend: X wirebonds crossed

X = bond missing

/ = bond broken

~ = bond damaged

Overall detector status:

(e.g. dusty surface, scratches, dirty frame and/or cable, status of telescope can ...)
