

### 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				9/23/07	dE, E <sub>f</sub> , E <sub>b</sub>
2				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					
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15				15				15					
16				16				16					
17				17				17					
18				18				18					
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22				22				22					
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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

T2219

ΔE = 2297-3  
E = 2403-7

### Front Side Data

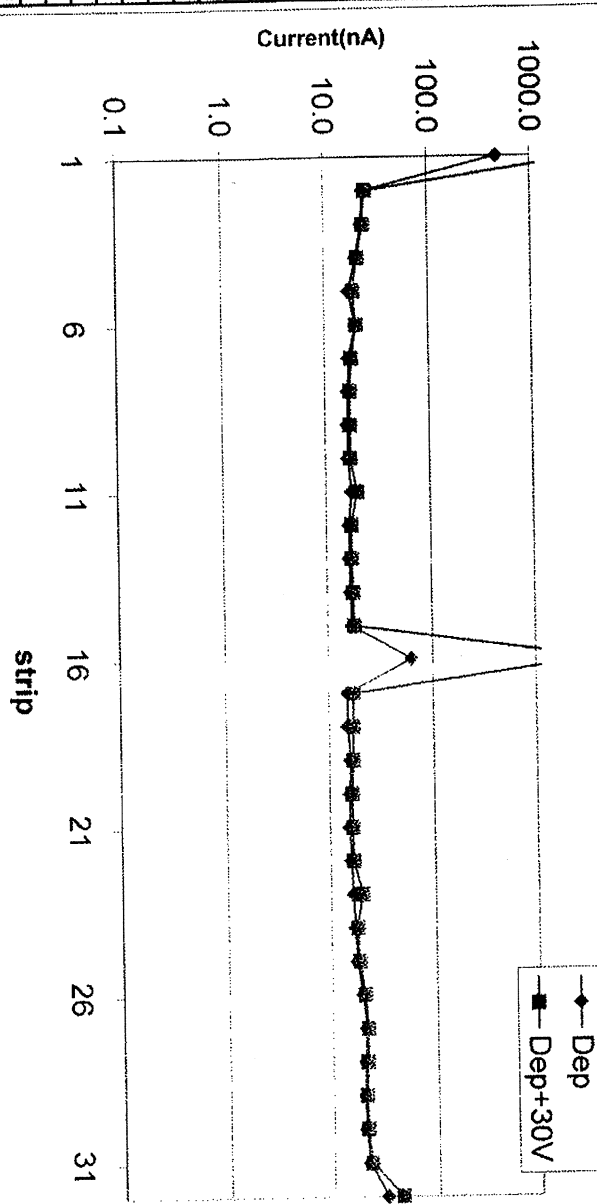
Strip	Current(nA)	Dep+30V
1	470.00	4000.00
2	23.70	24.90
3	22.90	23.50
4	20.20	20.90
5	17.10	18.90
6	19.70	20.00
7	16.90	17.80
8	16.50	17.40
9	16.40	17.30
10	16.40	17.30
11	17.40	19.80
12	16.30	17.30
13	16.30	17.30
14	16.60	17.60
15	16.90	17.90
16	62.20	4000.00
17	15.10	17.10
18	15.00	17.00
19	15.80	16.80
20	15.40	16.40
21	15.30	16.30
22	15.60	16.60
23	16.20	19.90
24	16.70	17.60
25	17.30	18.30
26	19.30	20.30
27	20.80	21.80
28	20.20	21.20
29	19.70	20.70
30	20.10	21.00
31	21.60	22.60
32	31.60	44.40
Total	1081.20	8595.90

Wafer No. **2403-7**

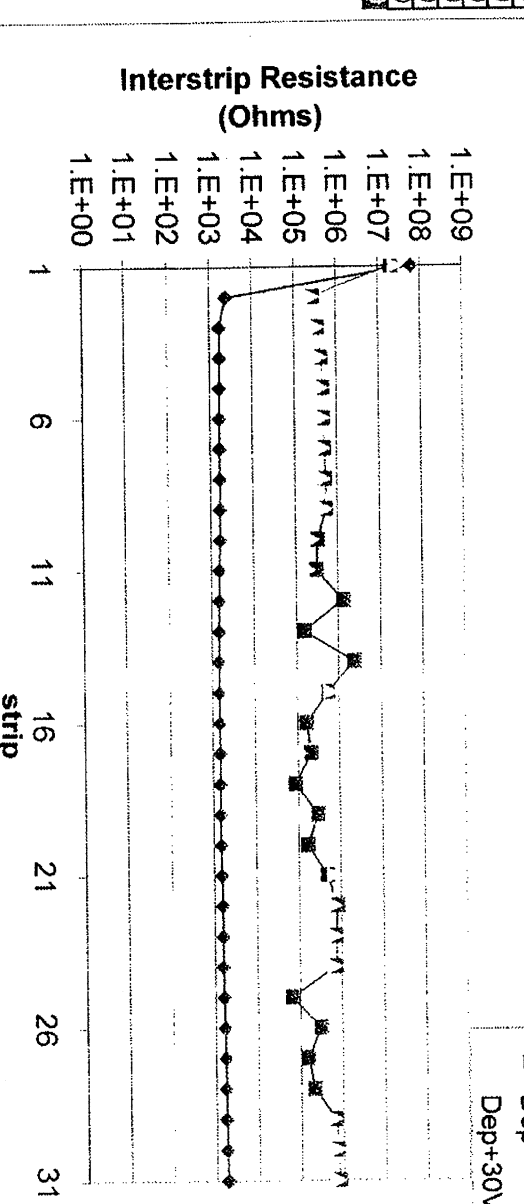
Thickness **1541** um

Depletion **280** Volts

### Front Side Strip Leakage Current



### Back Side Inter-strip Resistance



### Back Side Data

Strip	0V	Dep	Dep+30V
1	6.2E+07	2.0E+07	2.6E+07
2	2.4E+03	2.8E+05	2.8E+05
3	1.7E+03	3.6E+05	3.6E+05
4	1.7E+03	4.2E+05	4.2E+05
5	1.7E+03	4.6E+05	4.5E+05
6	1.7E+03	4.8E+05	4.7E+05
7	1.7E+03	5.0E+05	4.9E+05
8	1.7E+03	5.2E+05	5.0E+05
9	1.7E+03	5.4E+05	5.2E+05
10	1.6E+03	3.3E+05	2.6E+05
11	1.6E+03	3.1E+05	2.0E+05
12	1.5E+03	1.3E+06	4.9E+05
13	1.5E+03	1.9E+05	5.2E+04
14	1.5E+03	2.3E+06	5.9E+05
15	1.5E+03	5.5E+05	6.2E+05
16	1.5E+03	1.6E+05	6.4E+05
17	1.5E+03	2.0E+05	1.2E+05
18	1.5E+03	8.6E+04	1.8E+04
19	1.5E+03	3.0E+05	1.4E+05
20	1.5E+03	1.7E+05	6.7E+05
21	1.5E+03	4.7E+05	6.9E+05
22	1.5E+03	8.2E+05	6.9E+05
23	1.6E+03	7.3E+05	7.0E+05
24	1.6E+03	7.4E+05	6.8E+05
25	1.6E+03	6.6E+04	2.3E+04
26	1.7E+03	3.1E+05	1.9E+05
27	1.7E+03	1.9E+05	6.1E+04
28	1.7E+03	2.1E+05	9.3E+04
29	1.7E+03	6.7E+05	6.2E+05
30	1.8E+03	7.2E+05	7.2E+05
31	1.8E+03	8.0E+05	7.5E+05

# Resolution Test

## HIRA BB7

Wafer No.: **2403-7**

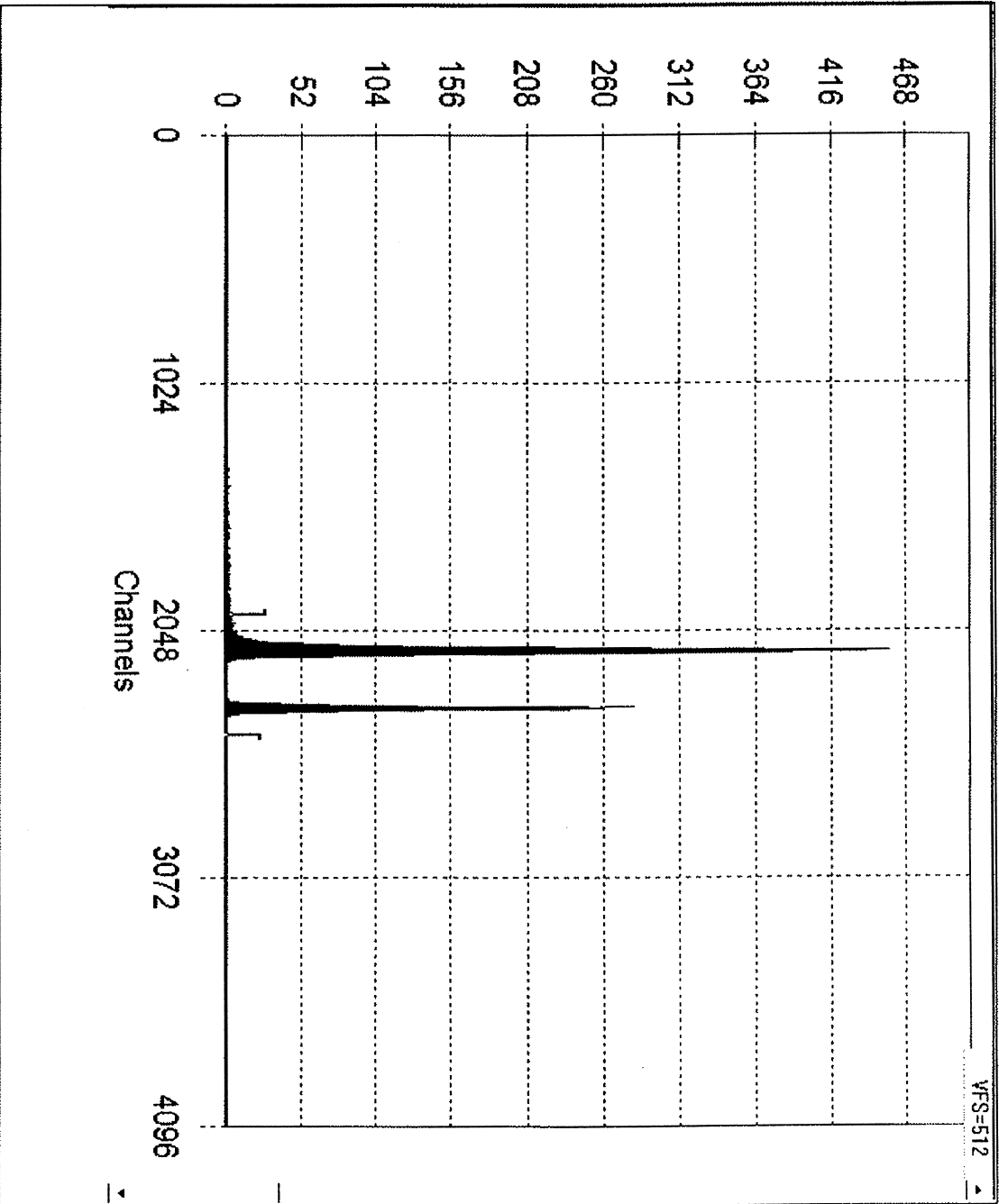
Thickness: **1541**  $\mu\text{m}$

### JUNCTION

DET LINE: **69.5** KeV  
SYSTEM: **48.8** KeV  
CAL: **49.5** KeV

### OHMIC

DET LINE: **71.9** KeV  
SYSTEM: **48.6** KeV  
CALC: **52.9** KeV



BIAS VOLTS=

**3.00** V

Leakage

**1570** nA

Source  
**Am 241**

Rise Time  
**1**

Flat Top  
**0**

Micron Semiconductor

31/03/2005

# Si-detector Inspection Record

Date: 9/23/07

Time: ~20:00

Tel n.: 19

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

1st inspector: Ulad HENZL

2nd inspector: Denise 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				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			
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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 ...)

E<sub>p</sub> wire bonds really almost perfect

E<sub>b</sub> wire bonds perfect

E = 2403-7 | dE = 2297-3

Chip 05133  
 bias lowered  
 by 10V to 250  
 noisy at 100V

Date		electronics		E front		E back	
9-18-07	CH1C	15	35mV	15	42	15	12mV
10-25-07	CH1C	14	160mV	14	42	14	50
10-31-07	CH1C	13	11mV	13	42	13	50
		12	180mV	12	42	12	50
		11	15mV	11	42	11	50
		10	450mV	10	42	10	50
		9	11mV	9	42	9	50
		8	7	8	42	8	50
		7	7	7	42	7	50
		6	7	6	42	6	50
		5	7	5	42	5	50
		4	10mV	4	42	4	50
		3	12mV	3	42	3	50
		2	180mV	2	42	2	50
		1	7	1	42	1	50
		chn 0	25mV	chn 0	42	chn 0	50
		15	180mV	15	42	15	50
		14	20mV	14	42	14	50
		13	20mV	13	42	13	50
		12	180mV	12	42	12	50
		11	14mV	11	42	11	50
		10	10mV	10	42	10	50
		9	500mV	9	42	9	50
		8	10mV	8	42	8	50
		7	7	7	42	7	50
		6	7	6	42	6	50
		5	7	5	42	5	50
		4	7	4	42	4	50
		3	15mV	3	42	3	50
		2	150mV	2	42	2	50
		1	210mV	1	42	1	50
		chn 0	1050mV	chn 0	42	chn 0	50
		15	~63mV	15	42	15	50
		14	42	14	42	14	50
		13	42	13	42	13	50
		12	42	12	42	12	50
		11	42	11	42	11	50
		10	42	10	42	10	50
		9	45/160	9	42	9	50
		8	50/200	8	42	8	50
		7	50/150	7	42	7	50
		6	~150	6	42	6	50
		5	~150	5	42	5	50
		4	~110	4	42	4	50
		3	42/125	3	42	3	50
		2	42/130	2	42	2	50
		1	42/160	1	42	1	50
		chn 0	42/42	chn 0	42	chn 0	50
		15	50	15	42	15	50
		14	50	14	42	14	50
		13	50	13	42	13	50
		12	50	12	42	12	50
		11	~50	11	42	11	50
		10	42/110	10	42	10	50
		9	42/100	9	42	9	50
		8	~160mV	8	42	8	50
		7	~200mV	7	42	7	50
		6	80/130	6	42	6	50
		5	42/120	5	42	5	50
		4	42/105	4	42	4	50
		3	42/130	3	42	3	50
		2	42/140	2	42	2	50
		1	42	1	42	1	50
		chn 0	42/150	chn 0	42	chn 0	50
		electronics	CH1C	electronics	CH1C	electronics	CH1C
		Date	10-31-07	Date	10-31-07	Date	10-31-07

Noise tests of detector n.: 2405-7 in telescope n.: 19

# Si-detector Inspection Record

Date: 10/8/2007 Time: 6:30 pm Tel n.: 19  
 Inspected detector(s): DE(2297-3) + E(2403-7)  
 What occasion: DE put back in com  
 1st inspector: Vlad 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				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: ✱ 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 ...)

DEFE surface cleaned with dry N<sub>2</sub>

# Si-detector Inspection Record

Date: 10/4/07  
 Time: 6:30pm  
 Inspected detector(s): FT+EB

1st inspector: William Keroll  
 2nd inspector: Henry Wc

## WIREBONDS STATUS

DE				E-front <i>all OK</i>				E-back			
strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd	strip n.:	1st	2nd	3rd
1				1				1			
2				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			
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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 ...)

AM change →