AMAT ENDURA 5500 PVD

1. GENERAL INFORMATION

Equip Code	ENDURA PVD
Model Number	**5500**
Vintage	**4/19/1993**

2. WAFER SPECIFICATION

Wafer Size		150mm	**YES** 200MM
Wafer Shape	**YES**	NOTCH	
SMIF Interface	**NO**	NO	

3. SYSTEM INFROMATION

NO	CHAMBER A (COOL)	**YES**	CHAMBER B (COOL)	**YES**	CHAMBER C CHAMBER F		
YES	CHAMBER D	**NO**	CHAMBER E (ORIENTER)	**YES**	(ORIENTER) CHAMBER 3		
YES	CHAMBER 1	**YES**	CHAMBER 2	**YES**	BUFFER CHAMBER	**YES**	CHAMBER 4
NO	CHAMBER A COOL	**YES**	CHAMBER B COOL	**YES**		**YES**	TRANSFER CHAMBER

Loadlock Type :	**YES**	NARROW		WIDE BODY
Software Version :				

4. CHAMBER TYPE

CHAMBER A	**NO**	
CHAMBER B	**YES**	COOLING
CHAMBER C	**YES**	ALU
CHAMBER D	**YES**	ALU
CHAMBER E	**NO**	
CHAMBER F	**YES**	ORIENTER
CHAMBER 1	**YES**	ALU
CHAMBER 2	**YES**	TI
CHAMBER 3	**YES**	TI
CHAMBER 4	**YES**	ALU

Chamber A Information

NIL

Buffer Chamber Information

chamber Type	**YES**	BUFFER CHAMBER
pump	**YES**	CTI-CRYOGENIC ON BOARD

Rough Pump	**YES**	TRIVAC LEYBOLD
Valve type	**YES**	VAT
CONVECTRON	**YES**	GRANVILLE PHILLIPS
ROBOT	**YES**	HP ROBOT

Transfer Chamber Information

chamber Type	**YES**	TRANSFER CHAMBER CTI-
pump	**YES**	CRYOGENIC ON BOARD
Rough Pump	**YES**	TRIVAC LEYBOLD
Valve type	**YES**	VAT
CONVECTRON	**YES**	GRANVILLE PHILLIPS
ROBOT	**YES**	HP ROBOT

Chamber B information

chamber Type	**YES**	COOLING CHAMBER
pump	**YES**	CTI-CRYOGENIC ON BOARD
Rough Pump	**YES**	TRIVAC LEYBOLD
Valve type	**YES**	VAT
CONVECTRON	**YES**	GRANVILLE PHILLIPS

4-1. CH. C INFORMATION

Chamber process	**YES**	Alu
Convectro gauge	**YES**	
Rough Pump	**YES**	TRIVAC LEYBOLD
HVAC Pump	**YES**	CTI-CRYOGENIC ON BOARD
CRYO COMPRESSOR	**YES**	CTI COMPRESSORS SHARED He
PRESSURE TRANSDUCER	**YES**	lines MKS BARATRON
RF GEN 1	**YES**	AE MDX-10K
RF GEN 2	**NO**	
WTM / ESC		

4-2. CH. D INFORMATION

Chamber process	**YES**	Alu
Convectro gauge	**YES**	GRANVILLE PHILLIPS
Rough Pump	**YES**	TRIVAC LEYBOLD
HVAC Pump	**YES**	CTI-CRYOGENIC ON BOARD
CRYO COMPRESSOR	**YES**	CTI COMPRESSORS SHARED He
PRESSURE TRANSDUCER	**YES**	lines MKS
RF GEN 1	**YES**	AE MDX-10K
RF GEN 2	**NO**	
WTM / ESC		

4-1. CH. 1 INFORMATION

Chamber process	**YES**	Alu
Pressure transducer	**yes**	MKS
ION GAUGE	**YES**	CTI
Convectron gauge	**YES**	Granville Phillips
Rough Pump	**YES**	TRIVAC LEYBOLD
HVAC Pump	**YES**	CTI-CRYOGENIC ON BOARD
CRYO COMPRESSOR	**YES**	CTI COMPRESSORS SHARED He
RF GEN 1	**YES**	lines AE MDX-L12M-650
RF GEN 2	**NO**	
WTM / ESC		

4-1. CH. 4 INFORMATION

Chamber process	**YES**	Alu
Pressure transducer ION	**yes**	MKS
GAUGE Convectron	**YES**	CTI
gauge Rough Pump	**YES**	Granville Phillips
HVAC Pump	**YES**	TRIVAC LEYBOLD
CRYO COMPRESSOR	**YES**	CTI-CRYOGENIC ON BOARD
RF GEN 1	**YES**	CTI COMPRESSORS SHARED He
RF GEN 2	**YES**	lines AE MDX-L12M-650
WTM / ESC	**NO**	

4-3. CH. 2 INFORMATION

Ti chamber	**YES**	WIDE BODY PVD CHAMBER TRIVAC
Rough Pump	**YES**	LEYBOLD
HVAC Pump	**YES**	CTI-CRYOGENIC ON BOARD 8F
TURBO COMPRESSOR	**YES**	CTI COMPRESSORS SHARED He lines
RF GEN 1	**YES**	AE MDX-L12M-650
RF GEN 2	**YES**	AE MDX-L12M-650
RF GEN 3	**YES**	COMDEL CX 600S
PRESSURE Control	**YES**	Standard CONVECTRON/MKS / ION GAUGE
WTM / ESC		

4-3. CH. 3 INFORMATION

Ti chamber	**YES**	WIDE BODY PVD CHAMBER
Rough Pump	**YES**	TRIVAC LEYBOLD
HVAC Pump	**YES**	CTI-CRYOGENIC ON BOARD 8F
TURBO COMPRESSOR	**YES**	CTI COMPRESSORS SHARED He lines AE
RF GEN 1	**YES**	MDX-L12M
RF GEN 2	**YES**	AE MDX-L12M
RF GEN 3	**YES**	COMDEL CX 600S

PRESSURE Control	**YES**	Standard CONVECTRON/MKS / ION GAUGE
WTM / ESC		

5. ELECTRICAL

Line Frequency		60Hz	**YES**	60Hz
Line Voltage		200/208V	**YES**	480V
Line Amperage		320A	**YES**	69.5A

5.1 TRANSFORMER

6. MAINFRAME INFORMATION

System Placement	**YES**	THROUGH WALL
Robot Type BUFFER	**YES**	HP Robot
Robot Type TRANSFER	**YES**	HP Robot
Robot Blade		Nickel Coated Al
		Ceramic
Wafer transfer Loadlock	**YES**	Centerfinder
Wafer Mapping	**YES**	Basic

8. Generator Rack

RACK 1

REMOTE +- 15V POWER SUPPLY	**YES**	RELAY CONTROL BOARD
AE MDX-L12M-650	**YES**	RELAY CONTROL BOARD
MDX -10K MASTER	**YES**	RELAY CONTROL BOARD
AE MDX-L18M	**YES**	Chamber interlock sellect
AE MDX-L12M	**YES**	ISO/AMP REMOTE
AE MDX-L12M	**YES**	ISO/AMP REMOTE
COMDEL CX 600S	**YES**	ISO/AMP REMOTE
	YES	ISO/AMP REMOTE
	YES	ISO/AMP REMOTE

	RACK 2

E-CHUCK SUPPLY	**CH 2&3 AC ON BOARD**
AE MDX-10K MASTER	**CH 3 1.5KV DC BUS CARD**
AE MDX-L12M-650	**'CH 2 1.5KV DC BUS CARD**
AE MDX-L12M-650	
COMDEL CX 600S	

TEST STAND

INDIPENDENT ROUGH VALVE AND GATE VALVE CONTROLLER	
AE GENERATOR	
AE GENERATOR	
AE GENERATOR SLAVE	
AE GENERATOR SLAVE	

9. CHILLER SYSTEM

NESLAB III HEAT EXCHANGER

10. MFC GAS

CHM D,CHM 3 & CHM 4

MFC 1	**YES**	SEC 4400MC 20 SCCM
MFC 2	**YES**	SEC 4400MC 200 SCCM
MFC 3	**YES**	SEC 4400MC 100 SCCM
MFC 4	**YES**	SEC 4400MC 100 SCCM
MFC 5	**YES**	SEC 4400M 100SCCM
MFC 6	**NO**	BLANK
MFC 7	**NO**	BLANK
MFC 8	**YES**	SEC 4400MC 100SCCM
MFC 9	**YES**	SEC 4400MC 100SCCM

MFC GAS

CHM C,CHM 1 & CHM 2

MFC 1	**YES**	SEC 4400MC 20 SCCM
MFC 2	**YES**	SEC 4400MC 200 SCCM
MFC 3	**YES**	SEC 4400MC 100 SCCM
MFC 4	**YES**	SEC 4400MC 100 SCCM
MFC 5	**YES**	SEC 4400M 100SCCM
MFC 6	**NO**	BLANK
MFC 7	**NO**	BLANK
MFC 8	**YES**	SEC 4400MC 100SCCM
MFC 9	**YES**	SEC 4400MC 100SCCM

11. SYSTEM CONTROLLER

Slot #	Top Rack BD	Present
1	System Reset	YES
3	Serial Isolater	YES
3	VGA VIDEO	YES
4	OMS	YES
5	DI/O	YES
6	DI/O	YES
7	DI/0	YES
8	DI/O	YES
9	DI/O	YES
10	DI/O	YES
11	SEI BOARD	YES
12	BLANK	YES
13	BLANK	YES
14	BLANK	YES
15	STEP CONT	YES
16	STEP CONT	YES
17	STEP CONT	YES
18	STEP CONT	YES
19	AI	YES

Slot #	Bottom Rack BD	Present
22	Hard Disk Drive	YES
23	BLANK	BLANK
24	BLANK	BLANK
25	332103 VGC	YES
26	332103 VGC	YES
27	332103 VGC	YES
28	332103 VGC	YES
29	5CH TC GAUGE	YES
30	5CH TC GAUGE	YES
31	332103 IGC	YES
32	332134 IGC	YES
33	DIO EXPENSION	BLANK
34	Chamber 1 DI/O	YES
35	Chamber 2 DI/O	YES
36	Chamber 3 DI/O	YES
37	Chamber 4 DI/O	YES
38	Chamber 5 DI/O	YES
39	Chamber C DI/O	YES
40	Chamber D DI/O	YES

20	AO	YES
21	AO	YES
22		
23		
24		
25		

41	FLOPPY DRIVE	YES
24	Mainframe DI/O 6	YES
47	BLANK	BLANL
48	VGC CRYO TEMP	YES
49	VGC AI MUX	YES
50	VGC AI MUX	YES
Slot #	Bottom Rack BD	Present
51	BLANK	BLANK
52	BLANK	BLANK
53	TC GAUGE OPTO	YES
54	IGC OPTO	YES
55	IGC OPTO	YES
56		

GENERATOR RACK +_ 15 VOLTS POWER SUPPLY

YES	RELAY CONTROL BOARD
YES	RELAY CONTROL BOARD
YES	RELAY CONTROL BOARD
YES	Chamber interlock sellect

YES	ISO/AMP REMOTE
YES	ISO/AMP REMOTE
YES	ISO/AMP REMOTE
YES	ISO/AMP REMOTE
YES	ISO/AMP REMOTE

E-CHUCK HI-V SUPPLY

CH 2&3 AC ON BOARD
CH 3 1.5KV DC BUS CARD
'CH 2 1.5KV DC BUS CARD