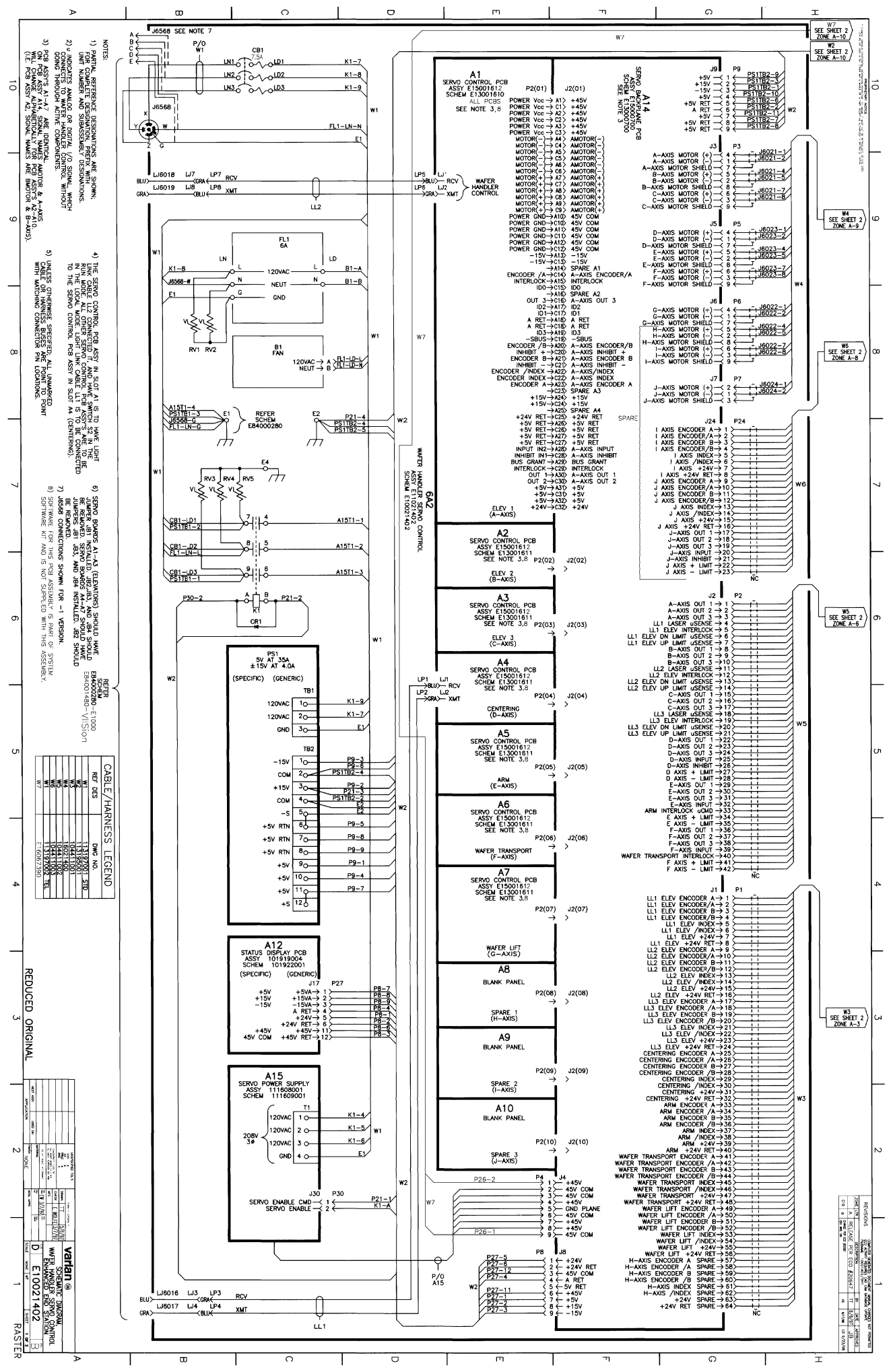
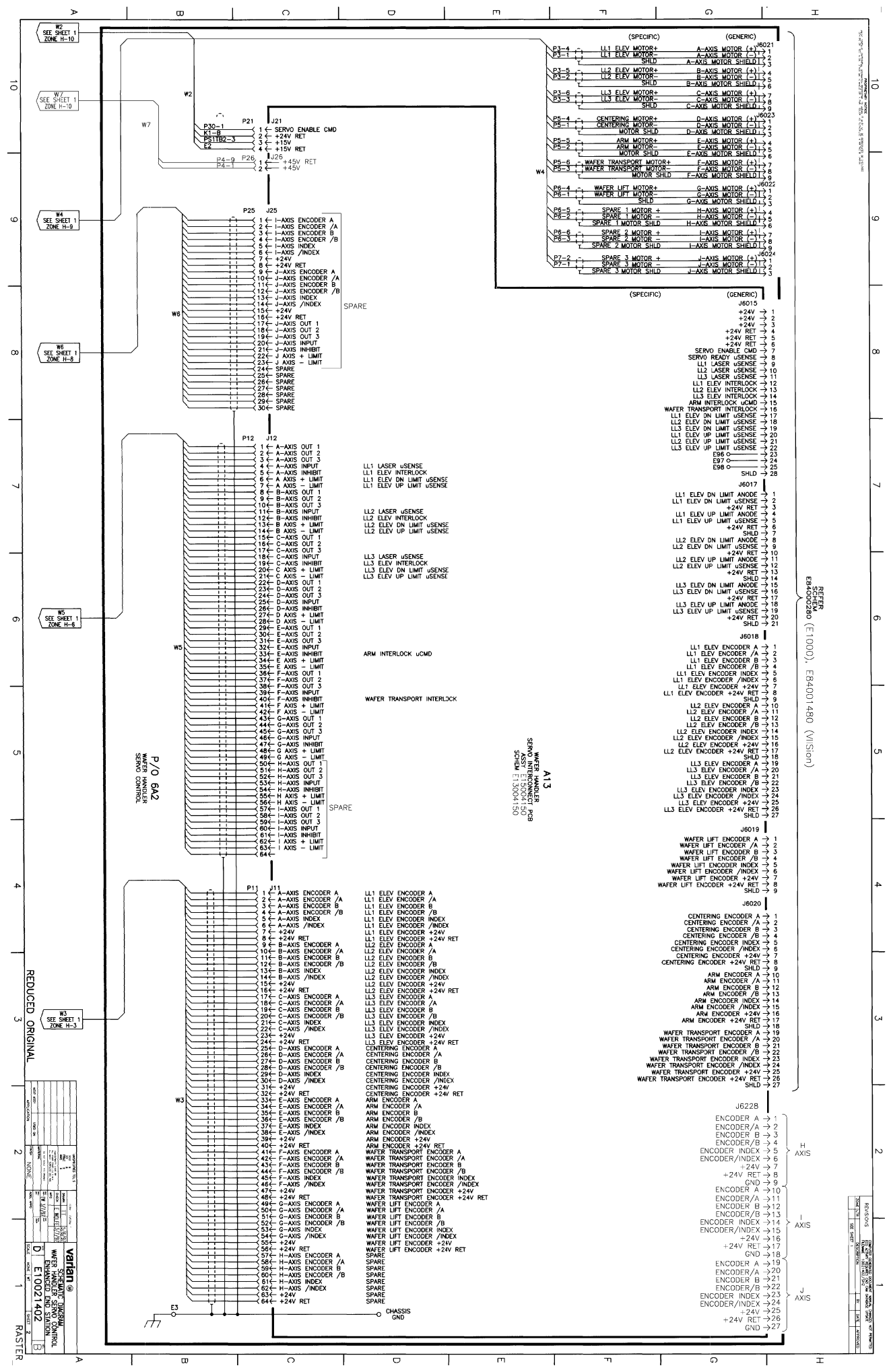

NOTES:
1) PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION, PREFIX WITH UNIT NUMBER AND SUBASSEMBLY DESIGNATIONS.
2) u INDICATES ANALOG OR DIGITAL I/O SIGNAL, WHICH CONNECTS TO WAFER HANDLER CONTROL WITHOUT GOING THROUGH ACTIVE COMPONENTS.
3) PCB ASSY A14, SIGNAL NAMES AMOTOR & A-AXIS, WILL CHANGE ALPHABETICALLY FOR PCB ASSY'S A2-A10, (I.E. PCB ASSY A2, SIGNAL NAMES ARE BMOTOR & B-AXIS).
4) THE SERVO CONTROL PCB ASSY IN SLOT A1 IS TO HAVE LIGHT LINK CABLE LL2 CONNECTED IT, AND HAVE SWITCH S2 IN THE ON POSITION. THE LOCAL MODE LIGHT LINK CABLE LL1 IS TO BE CONNECTED TO THE SERVO CONTROL PCB ASSY IN SLOT A4 (CENTERING).
5) UNLESS OTHERWISE SPECIFIED; ALL UNNAMED CABLE OR HARNESS BUSES ARE POINT TO POINT WITH MATCHING CONNECTOR PIN LOCATIONS.
6) SERVO BOARDS A1-A3 (ELEVATORS) SHOULD HAVE JUMPER JB1 INSTALLED. JB2,JB3, AND JB4 SHOULD BE REMOVED. SERVO BOARDS A4-A7 SHOULD HAVE JB1, JB3, AND JB4 INSTALLED. JB2 SHOULD BE REMOVED.
7) J6568 CONNECTIONS SHOWN FOR -1 VERSION.
8) SOFTWARE FOR THIS PCB ASSEMBLY IS PART OF SYSTEM SOFTWARE KIT AND IS NOT SUPPLIED WITH THIS ASSEMBLY.
REFER SCHEMATIC E10001 EB400148G-VISION
CABLE/HARNESS LEGEND
REF DES | DWG NO.
W1 | 113107001 STD
W2 | 113106001
W3 | 10441 1001
W4 | 10441 1002
W5 | 10441 1003
W6 | 10441 1004
W7 | 113107002 TEL
REDUCED ORIGINAL
varian
SCHEMATIC DIAGRAM
WAFER HANDLER SERVO CONTROL
ENHANCED END STATION
D E10021402
RASTER
REVISIONS
J6568 SEE NOTE 7
P/O W1
CB1 1.5A
LN1 LN2 LN3
LD1 LD2 LD3
K1-7 K1-8 K1-9
FL1-LN-N
E1
LJ6018 LJ7 LP7 RCV
LJ6019 LJ8 LP8 XMT
LL2
WAFER HANDLER CONTROL
FL1 6A
120VAC
NEUT
GND
B1-A B1-B
RV1 RV2
B1 FAN
120VAC → A FL1-LD-L
NEUT → B FL1-LD-N
A15T1-4 PS11B1-3 J6568-G FL1-LN-G
REFER SCHEM E84000280
E2 P21-4 PS11B2-4 PS11B2-5
E4
RV3 RV4 RV5
CB1-LD1 PS11B1-2 A15T1-1
CB1-D2 FL1-LN-L A15T1-2
CB1-LD3 PS11B1-1 A15T1-3
P30-2 K1 P21-2
CR1 14
6A2 WAFER HANDLER SERVO CONTROL ASSEMBLY E10021402
PS1 5V AT 35A ±15V AT 4.0A
(SPECIFIC) (GENERIC)
TB1
120VAC K1-9
120VAC K1-7
GND E1
TB2
-15V P9-3 P9-6
COM PS11B2-4
+15V P9-2
COM PS11B2-3 E2
-S E2
+5V RTN P9-5
+5V RTN P9-8
+5V RTN P9-9
+5V P9-1
+5V P9-4
+5V P9-7
+S
A12
STATUS DISPLAY PCB
ASSY 101919004
SCHEM 101922001
(SPECIFIC) (GENERIC)
J17 P27
+5V +5VA P8-7
+15V +15VA P8-8
-15V -15VA P8-9
A RET P8-1
+24V P8-2
+24V RET P8-3
+45V +45V P8-4
45V COM +45V RET P8-5
A15
SERVO POWER SUPPLY
ASSY 111608001
SCHEM 111609001
T1
120VAC K1-4
120VAC K1-5
120VAC K1-6
GND E1
208V 3ø
J30 P30
SERVO ENABLE CMD P21-1
SERVO ENABLE K1-A
P/O A15
LJ6016 LJ3 LP3 RCV
LJ6017 LJ4 LP4 XMT
LL1
A1
SERVO CONTROL PCB
ASSY E15001612
SCHEM E13001610
ALL PCBS
SEE NOTE 3,8
P2(01) J2(01)
POWER Vcc → A1 +45V
POWER Vcc → C1 +45V
POWER Vcc → A2 +45V
POWER Vcc → C2 +45V
POWER Vcc → A3 +45V
POWER Vcc → C3 +45V
MOTOR(-) → A4 AMOTOR(-)
MOTOR(-) → C4 AMOTOR(-)
MOTOR(-) → A5 AMOTOR(-)
MOTOR(-) → C5 AMOTOR(-)
MOTOR(-) → A6 AMOTOR(-)
MOTOR(-) → C6 AMOTOR(-)
MOTOR(+) → A7 AMOTOR(+)
MOTOR(+) → C7 AMOTOR(+)
MOTOR(+) → A8 AMOTOR(+)
MOTOR(+) → C8 AMOTOR(+)
MOTOR(+) → A9 AMOTOR(+)
MOTOR(+) → C9 AMOTOR(+)
POWER GND → A10 45V COM
POWER GND → C10 45V COM
POWER GND → A11 45V COM
POWER GND → C11 45V COM
POWER GND → A12 45V COM
POWER GND → C12 45V COM
-15V → A13 -15V
-15V → C13 -15V
→ A14 SPARE A1
ENCODER /A → C14 A-AXIS ENCODER/A
INTERLOCK → A15 INTERLOCK
ID0 → C15 ID0
→ A16 SPARE A2
OUT 3 → C16 A-AXIS OUT 3
ID2 → A17 ID2
ID1 → C17 ID1
A RET → A18 A RET
A RET → C18 A RET
ID3 → A19 ID3
-SBUS → C19 -SBUS
ENCODER /B → A20 A-AXIS ENCODER/B
INHIBIT + → C20 A-AXIS INHIBIT +
ENCODER B → A21 A-AXIS ENCODER B
INHIBIT - → C21 A-AXIS INHIBIT -
ENCODER /INDEX → A22 A-AXIS/INDEX
ENCODER INDEX → C22 A-AXIS INDEX
ENCODER A → A23 A-AXIS ENCODER A
→ C23 SPARE A3
+15V → A24 +15V
+15V → C24 +15V
→ A25 SPARE A4
+24V RET → C25 +24V RET
+5V RET → A26 +5V RET
+5V RET → C26 +5V RET
+5V RET → A27 +5V RET
+5V RET → C27 +5V RET
INPUT IN2 → A28 A-AXIS INPUT
INHIBIT IN1 → C28 A-AXIS INHIBIT
BUS GRANT → A29 BUS GRANT
INTERLOCK → C29 INTERLOCK
OUT 1 → A30 A-AXIS OUT 1
OUT 2 → C30 A-AXIS OUT 2
+5V → A31 +5V
+5V → C31 +5V
+5V → A32 +5V
+24V → C32 +24V
ELEV 1 (A-AXIS)
A2
SERVO CONTROL PCB
ASSY E15001612
SCHEM E13001611
SEE NOTE 3,8
P2(02) J2(02)
ELEV 2 (B-AXIS)
A3
SERVO CONTROL PCB
ASSY E15001612
SCHEM E13001611
SEE NOTE 3,8
P2(03) J2(03)
ELEV 3 (C-AXIS)
A4
SERVO CONTROL PCB
ASSY E15001612
SCHEM E13001611
SEE NOTE 3,8
LP1 LJ1 RCV
LP2 LL2 XMT
P2(04) J2(04)
CENTERING (D-AXIS)
A5
SERVO CONTROL PCB
ASSY E15001612
SCHEM E13001611
SEE NOTE 3,8
P2(05) J2(05)
ARM (E-AXIS)
A6
SERVO CONTROL PCB
ASSY E15001612
SCHEM E13001611
SEE NOTE 3,8
P2(06) J2(06)
WAFER TRANSPORT (F-AXIS)
A7
SERVO CONTROL PCB
ASSY E15001612
SCHEM E13001611
SEE NOTE 3,8
P2(07) J2(07)
WAFER LIFT (G-AXIS)
A8
BLANK PANEL
P2(08) J2(08)
SPARE 1 (H-AXIS)
A9
BLANK PANEL
P2(09) J2(09)
SPARE 2 (I-AXIS)
A10
BLANK PANEL
P2(10) J2(10)
SPARE 3 (J-AXIS)
P26-2 P4 J4
1 +45V
2 45V COM
3 45V COM
4 +45V
5 GND PLANE
6 45V COM
7 +45V
8 +45V
9 45V COM
P26-1
P8 J8
P27-5 1 +24V
P27-6 2 +24V RET
P27-12 3 45V COM
P27-4 4 A RET
5 -5V RET
P27-11 6 +45V
P27-1 7 +5V
P27-2 8 +15V
P27-3 9 -15V
NC
A14
SERVO BACKPLANE PCB
ASSY E10001700
SEE NOTE 3
J9 P9
+5V 1 PS11B2-9
+15V 2 PS11B2-3
-15V 3 PS11B2-1
+5V 4 PS11B2-10
+5V RET 5 PS11B2-6
A RET 6 PS11B2-2
+5V 7 PS11B2-11
+5V RET 8 PS11B2-7
+5V RET 9 PS11B2-8
J3 P3
A-AXIS MOTOR (+) 4 J6021-1
A-AXIS MOTOR (-) 1 J6021-2
A-AXIS MOTOR SHIELD 7
B-AXIS MOTOR (+) 5 J6021-4
B-AXIS MOTOR (-) 2 J6021-5
B-AXIS MOTOR SHIELD 8
C-AXIS MOTOR (+) 6 J6021-7
C-AXIS MOTOR (-) 3 J6021-8
C-AXIS MOTOR SHIELD 9
J5 P5
D-AXIS MOTOR (+) 4 J6023-1
D-AXIS MOTOR (-) 1 J6023-2
D-AXIS MOTOR SHIELD 7
E-AXIS MOTOR (+) 5 J6023-4
E-AXIS MOTOR (-) 2 J6023-5
E-AXIS MOTOR SHIELD 8
F-AXIS MOTOR (+) 6 J6023-7
F-AXIS MOTOR (-) 3 J6023-8
F-AXIS MOTOR SHIELD 9
J6 P6
G-AXIS MOTOR (+) 4 J6022-1
G-AXIS MOTOR (-) 1 J6022-2
G-AXIS MOTOR SHIELD 7
H-AXIS MOTOR (+) 5 J6022-4
H-AXIS MOTOR (-) 2 J6022-5
H-AXIS MOTOR SHIELD 8
I-AXIS MOTOR (+) 6 J6022-7
I-AXIS MOTOR (-) 3 J6022-8
I-AXIS MOTOR SHIELD 9
J7 P7
J-AXIS MOTOR (+) 2 J6024-1
J-AXIS MOTOR (-) 1 J6024-2
J-AXIS MOTOR SHIELD 3
SPARE
J24 P24
I AXIS ENCODER A → 1
I AXIS ENCODER/A → 2
I AXIS ENCODER B → 3
I AXIS ENCODER/B → 4
I AXIS INDEX → 5
I AXIS /INDEX → 6
I AXIS +24V → 7
I AXIS +24V RET → 8
J AXIS ENCODER A → 9
J AXIS ENCODER/A → 10
J AXIS ENCODER B → 11
J AXIS ENCODER/B → 12
J AXIS INDEX → 13
J AXIS /INDEX → 14
J AXIS +24V → 15
J AXIS +24V RET → 16
J-AXIS OUT 1 → 17
J-AXIS OUT 2 → 18
J-AXIS OUT 3 → 19
J-AXIS INPUT → 20
J-AXIS INHIBIT → 21
J AXIS + LIMIT → 22
J AXIS - LIMIT → 23
NC
J2 P2
A-AXIS OUT 1 → 1
A-AXIS OUT 2 → 2
A-AXIS OUT 3 → 3
LL1 LASER uSENSE → 4
LL1 ELEV INTERLOCK → 5
LL1 ELEV DN LIMIT uSENSE → 6
LL1 ELEV UP LIMIT uSENSE → 7
B-AXIS OUT 1 → 8
B-AXIS OUT 2 → 9
B-AXIS OUT 3 → 10
LL2 LASER uSENSE → 11
LL2 ELEV INTERLOCK → 12
LL2 ELEV DN LIMIT uSENSE → 13
LL2 ELEV UP LIMIT uSENSE → 14
C-AXIS OUT 1 → 15
C-AXIS OUT 2 → 16
C-AXIS OUT 3 → 17
LL3 LASER uSENSE → 18
LL3 ELEV INTERLOCK → 19
LL3 ELEV DN LIMIT uSENSE → 20
LL3 ELEV UP LIMIT uSENSE → 21
D-AXIS OUT 1 → 22
D-AXIS OUT 2 → 23
D-AXIS OUT 3 → 24
D-AXIS INPUT → 25
D-AXIS INHIBIT → 26
D AXIS + LIMIT → 27
D AXIS - LIMIT → 28
E-AXIS OUT 1 → 29
E-AXIS OUT 2 → 30
E-AXIS OUT 3 → 31
E-AXIS INPUT → 32
ARM INTERLOCK uCMD → 33
E AXIS + LIMIT → 34
E AXIS - LIMIT → 35
F-AXIS OUT 1 → 36
F-AXIS OUT 2 → 37
F-AXIS OUT 3 → 38
F-AXIS INPUT → 39
WAFER TRANSPORT INTERLOCK → 40
F AXIS + LIMIT → 41
F AXIS - LIMIT → 42
NC
J1 P1
LL1 ELEV ENCODER A → 1
LL1 ELEV ENCODER/A → 2
LL1 ELEV ENCODER B → 3
LL1 ELEV ENCODER/B → 4
LL1 ELEV INDEX → 5
LL1 ELEV /INDEX → 6
LL1 ELEV +24V → 7
LL1 ELEV +24V RET → 8
LL2 ELEV ENCODER A → 9
LL2 ELEV ENCODER/A → 10
LL2 ELEV ENCODER B → 11
LL2 ELEV ENCODER/B → 12
LL2 ELEV INDEX → 13
LL2 ELEV /INDEX → 14
LL2 ELEV +24V → 15
LL2 ELEV +24V RET → 16
LL3 ELEV ENCODER A → 17
LL3 ELEV ENCODER/A → 18
LL3 ELEV ENCODER B → 19
LL3 ELEV ENCODER/B → 20
LL3 ELEV INDEX → 21
LL3 ELEV /INDEX → 22
LL3 ELEV +24V → 23
LL3 ELEV +24V RET → 24
CENTERING ENCODER A → 25
CENTERING ENCODER /A → 26
CENTERING ENCODER B → 27
CENTERING ENCODER /B → 28
CENTERING INDEX → 29
CENTERING /INDEX → 30
CENTERING +24V → 31
CENTERING +24V RET → 32
ARM ENCODER A → 33
ARM ENCODER /A → 34
ARM ENCODER B → 35
ARM ENCODER /B → 36
ARM INDEX → 37
ARM /INDEX → 38
ARM +24V → 39
ARM +24V RET → 40
WAFER TRANSPORT ENCODER A → 41
WAFER TRANSPORT ENCODER /A → 42
WAFER TRANSPORT ENCODER B → 43
WAFER TRANSPORT ENCODER /B → 44
WAFER TRANSPORT INDEX → 45
WAFER TRANSPORT /INDEX → 46
WAFER TRANSPORT +24V → 47
WAFER TRANSPORT +24V RET → 48
WAFER LIFT ENCODER A → 49
WAFER LIFT ENCODER /A → 50
WAFER LIFT ENCODER B → 51
WAFER LIFT ENCODER /B → 52
WAFER LIFT INDEX → 53
WAFER LIFT /INDEX → 54
WAFER LIFT +24V → 55
WAFER LIFT +24V RET → 56
H-AXIS ENCODER A SPARE → 57
H-AXIS ENCODER /A SPARE → 58
H-AXIS ENCODER B SPARE → 59
H-AXIS ENCODER /B SPARE → 60
H-AXIS INDEX SPARE → 61
H-AXIS /INDEX SPARE → 62
+24V SPARE → 63
+24V RET SPARE → 64
NC
W7 SEE SHEET 2 ZONE A-10
W2 SEE SHEET 2 ZONE A-10
W4 SEE SHEET 2 ZONE A-9
W6 SEE SHEET 2 ZONE A-8
W5 SEE SHEET 2 ZONE A-6
W3 SEE SHEET 2 ZONE A-3


W2 SEE SHEET 1 ZONE H-10
W7 SEE SHEET 1 ZONE H-10
W4 SEE SHEET 1 ZONE H-9
W6 SEE SHEET 1 ZONE H-8
W5 SEE SHEET 1 ZONE H-6
W3 SEE SHEET 1 ZONE H-3
P21 J21
1 ← SERVO ENABLE CMD
2 ← +24V RET
3 ← +15V
4 ← +15V RET
P26 J26
+45V RET
+45V
P25 J25
1 ← I-AXIS ENCODER A
2 ← I-AXIS ENCODER /A
3 ← I-AXIS ENCODER B
4 ← I-AXIS ENCODER /B
5 ← I-AXIS INDEX
6 ← I-AXIS /INDEX
7 ← +24V
8 ← +24V RET
9 ← J-AXIS ENCODER A
10 ← J-AXIS ENCODER /A
11 ← J-AXIS ENCODER B
12 ← J-AXIS ENCODER /B
13 ← J-AXIS INDEX
14 ← J-AXIS /INDEX
15 ← +24V
16 ← +24V RET
17 ← J-AXIS OUT 1
18 ← J-AXIS OUT 2
19 ← J-AXIS OUT 3
20 ← J-AXIS INPUT
21 ← J-AXIS INHIBIT
22 ← J AXIS + LIMIT
23 ← J AXIS − LIMIT
24 ← SPARE
25 ← SPARE
26 ← SPARE
27 ← SPARE
28 ← SPARE
29 ← SPARE
30 ← SPARE
SPARE
P12 J12
1 ← A-AXIS OUT 1
2 ← A-AXIS OUT 2
3 ← A-AXIS OUT 3
4 ← A-AXIS INPUT
5 ← A-AXIS INHIBIT
6 ← A AXIS + LIMIT
7 ← A AXIS − LIMIT
8 ← B-AXIS OUT 1
9 ← B-AXIS OUT 2
10 ← B-AXIS OUT 3
11 ← B-AXIS INPUT
12 ← B-AXIS INHIBIT
13 ← B AXIS + LIMIT
14 ← B AXIS − LIMIT
15 ← C-AXIS OUT 1
16 ← C-AXIS OUT 2
17 ← C-AXIS OUT 3
18 ← C-AXIS INPUT
19 ← C-AXIS INHIBIT
20 ← C AXIS + LIMIT
21 ← C AXIS − LIMIT
22 ← D-AXIS OUT 1
23 ← D-AXIS OUT 2
24 ← D-AXIS OUT 3
25 ← D-AXIS INPUT
26 ← D-AXIS INHIBIT
27 ← D AXIS + LIMIT
28 ← D AXIS − LIMIT
29 ← E-AXIS OUT 1
30 ← E-AXIS OUT 2
31 ← E-AXIS OUT 3
32 ← E-AXIS INPUT
33 ← E-AXIS INHIBIT
34 ← E AXIS + LIMIT
35 ← E AXIS − LIMIT
36 ← F-AXIS OUT 1
37 ← F-AXIS OUT 2
38 ← F-AXIS OUT 3
39 ← F-AXIS INPUT
40 ← F-AXIS INHIBIT
41 ← F AXIS + LIMIT
42 ← F AXIS − LIMIT
43 ← G-AXIS OUT 1
44 ← G-AXIS OUT 2
45 ← G-AXIS OUT 3
46 ← G-AXIS INPUT
47 ← G-AXIS INHIBIT
48 ← G AXIS + LIMIT
49 ← G AXIS − LIMIT
50 ← H-AXIS OUT 1
51 ← H-AXIS OUT 2
52 ← H-AXIS OUT 3
53 ← H-AXIS INPUT
54 ← H-AXIS INHIBIT
55 ← H AXIS + LIMIT
56 ← H AXIS − LIMIT
57 ← I-AXIS OUT 1
58 ← I-AXIS OUT 2
59 ← I-AXIS OUT 3
60 ← I-AXIS INPUT
61 ← I-AXIS INHIBIT
62 ← I AXIS + LIMIT
63 ← I AXIS − LIMIT
64 ←
SPARE
P11 J11
1 ← A-AXIS ENCODER A
2 ← A-AXIS ENCODER /A
3 ← A-AXIS ENCODER B
4 ← A-AXIS ENCODER /B
5 ← A-AXIS INDEX
6 ← A-AXIS /INDEX
7 ← +24V
8 ← +24V RET
9 ← B-AXIS ENCODER A
10 ← B-AXIS ENCODER /A
11 ← B-AXIS ENCODER B
12 ← B-AXIS ENCODER /B
13 ← B-AXIS INDEX
14 ← B-AXIS /INDEX
15 ← +24V
16 ← +24V RET
17 ← C-AXIS ENCODER A
18 ← C-AXIS ENCODER /A
19 ← C-AXIS ENCODER B
20 ← C-AXIS ENCODER /B
21 ← C-AXIS INDEX
22 ← C-AXIS /INDEX
23 ← +24V
24 ← +24V RET
25 ← D-AXIS ENCODER A
26 ← D-AXIS ENCODER /A
27 ← D-AXIS ENCODER B
28 ← D-AXIS ENCODER /B
29 ← D-AXIS INDEX
30 ← D-AXIS /INDEX
31 ← +24V
32 ← +24V RET
33 ← E-AXIS ENCODER A
34 ← E-AXIS ENCODER /A
35 ← E-AXIS ENCODER B
36 ← E-AXIS ENCODER /B
37 ← E-AXIS INDEX
38 ← E-AXIS /INDEX
39 ← +24V
40 ← +24V RET
41 ← F-AXIS ENCODER A
42 ← F-AXIS ENCODER /A
43 ← F-AXIS ENCODER B
44 ← F-AXIS ENCODER /B
45 ← F-AXIS INDEX
46 ← F-AXIS /INDEX
47 ← +24V
48 ← +24V RET
49 ← G-AXIS ENCODER A
50 ← G-AXIS ENCODER /A
51 ← G-AXIS ENCODER B
52 ← G-AXIS ENCODER /B
53 ← G-AXIS INDEX
54 ← G-AXIS /INDEX
55 ← +24V
56 ← +24V RET
57 ← H-AXIS ENCODER A
58 ← H-AXIS ENCODER /A
59 ← H-AXIS ENCODER B
60 ← H-AXIS ENCODER /B
61 ← H-AXIS INDEX
62 ← H-AXIS /INDEX
63 ← +24V
64 ← +24V RET
LL1 LASER uSENSE
LL1 ELEV INTERLOCK
LL1 ELEV DN LIMIT uSENSE
LL1 ELEV UP LIMIT uSENSE
LL2 LASER uSENSE
LL2 ELEV INTERLOCK
LL2 ELEV DN LIMIT uSENSE
LL2 ELEV UP LIMIT uSENSE
LL3 LASER uSENSE
LL3 ELEV INTERLOCK
LL3 ELEV DN LIMIT uSENSE
LL3 ELEV UP LIMIT uSENSE
ARM INTERLOCK uCMD
WAFER TRANSPORT INTERLOCK
LL1 ELEV ENCODER A
LL1 ELEV ENCODER /A
LL1 ELEV ENCODER B
LL1 ELEV ENCODER /B
LL1 ELEV ENCODER INDEX
LL1 ELEV ENCODER /INDEX
LL1 ELEV ENCODER +24V
LL1 ELEV ENCODER +24V RET
LL2 ELEV ENCODER A
LL2 ELEV ENCODER /A
LL2 ELEV ENCODER B
LL2 ELEV ENCODER /B
LL2 ELEV ENCODER INDEX
LL2 ELEV ENCODER /INDEX
LL2 ELEV ENCODER +24V
LL2 ELEV ENCODER +24V RET
LL3 ELEV ENCODER A
LL3 ELEV ENCODER /A
LL3 ELEV ENCODER B
LL3 ELEV ENCODER /B
LL3 ELEV ENCODER INDEX
LL3 ELEV ENCODER /INDEX
LL3 ELEV ENCODER +24V
LL3 ELEV ENCODER +24V RET
CENTERING ENCODER A
CENTERING ENCODER /A
CENTERING ENCODER B
CENTERING ENCODER /B
CENTERING ENCODER INDEX
CENTERING ENCODER /INDEX
CENTERING ENCODER +24V
CENTERING ENCODER +24V RET
ARM ENCODER A
ARM ENCODER /A
ARM ENCODER B
ARM ENCODER /B
ARM ENCODER INDEX
ARM ENCODER /INDEX
ARM ENCODER +24V
ARM ENCODER +24V RET
WAFER TRANSPORT ENCODER A
WAFER TRANSPORT ENCODER /A
WAFER TRANSPORT ENCODER B
WAFER TRANSPORT ENCODER /B
WAFER TRANSPORT ENCODER INDEX
WAFER TRANSPORT ENCODER /INDEX
WAFER TRANSPORT ENCODER +24V
WAFER TRANSPORT ENCODER +24V RET
WAFER LIFT ENCODER A
WAFER LIFT ENCODER /A
WAFER LIFT ENCODER B
WAFER LIFT ENCODER /B
WAFER LIFT ENCODER INDEX
WAFER LIFT ENCODER /INDEX
WAFER LIFT ENCODER +24V
WAFER LIFT ENCODER +24V RET
SPARE
E3
CHASSIS GND
P/O 6A2
WAFER HANDLER SERVO CONTROL
A13
WAFER HANDLER SERVO INTERCONNECT PCB ASSY E15004150 SCHEM E13004150
(SPECIFIC) (GENERIC)
J6021
P3-4 LL1 ELEV MOTOR+ A-AXIS MOTOR (+) 1
P3-1 LL1 ELEV MOTOR− A-AXIS MOTOR (−) 2
SHLD A-AXIS MOTOR SHIELD 3
P3-5 LL2 ELEV MOTOR+ B-AXIS MOTOR (+) 4
P3-2 LL2 ELEV MOTOR− B-AXIS MOTOR (−) 5
SHLD B-AXIS MOTOR SHIELD 6
P3-6 LL3 ELEV MOTOR+ C-AXIS MOTOR (+) 7
P3-3 LL3 ELEV MOTOR− C-AXIS MOTOR (−) 8
SHLD C-AXIS MOTOR SHIELD 9
J6023
P5-4 CENTERING MOTOR+ D-AXIS MOTOR (+) 1
P5-1 CENTERING MOTOR− D-AXIS MOTOR (−) 2
MOTOR SHLD D-AXIS MOTOR SHIELD 3
P5-5 ARM MOTOR+ E-AXIS MOTOR (+) 4
P5-2 ARM MOTOR− E-AXIS MOTOR (−) 5
MOTOR SHLD E-AXIS MOTOR SHIELD 6
P5-6 WAFER TRANSPORT MOTOR+ F-AXIS MOTOR (+) 7
P5-3 WAFER TRANSPORT MOTOR− F-AXIS MOTOR (−) 8
MOTOR SHLD F-AXIS MOTOR SHIELD 9
J6022
P6-4 WAFER LIFT MOTOR+ G-AXIS MOTOR (+) 1
P6-1 WAFER LIFT MOTOR− G-AXIS MOTOR (−) 2
SHLD G-AXIS MOTOR SHIELD 3
P6-5 SPARE 1 MOTOR + H-AXIS MOTOR (+) 4
P6-2 SPARE 1 MOTOR − H-AXIS MOTOR (−) 5
SPARE 1 MOTOR SHLD H-AXIS MOTOR SHIELD 6
P6-6 SPARE 2 MOTOR + I-AXIS MOTOR (+) 7
P6-3 SPARE 2 MOTOR − I-AXIS MOTOR (−) 8
SPARE 2 MOTOR SHLD I-AXIS MOTOR SHIELD 9
J6024
P7-2 SPARE 3 MOTOR + J-AXIS MOTOR (+) 1
P7-1 SPARE 3 MOTOR − J-AXIS MOTOR (−) 2
SPARE 3 MOTOR SHLD J-AXIS MOTOR SHIELD 3
J6015
+24V → 1
+24V → 2
+24V → 3
+24V RET → 4
+24V RET → 5
+24V RET → 6
SERVO ENABLE CMD → 7
SERVO READY uSENSE → 8
LL1 LASER uSENSE → 9
LL2 LASER uSENSE → 10
LL3 LASER uSENSE → 11
LL1 ELEV INTERLOCK → 12
LL2 ELEV INTERLOCK → 13
LL3 ELEV INTERLOCK → 14
ARM INTERLOCK uCMD → 15
WAFER TRANSPORT INTERLOCK → 16
LL1 ELEV DN LIMIT uSENSE → 17
LL2 ELEV DN LIMIT uSENSE → 18
LL3 ELEV DN LIMIT uSENSE → 19
LL1 ELEV UP LIMIT uSENSE → 20
LL2 ELEV UP LIMIT uSENSE → 21
LL3 ELEV UP LIMIT uSENSE → 22
E96 → 23
E97 → 24
E98 → 25
SHLD → 28
J6017
LL1 ELEV DN LIMIT ANODE → 1
LL1 ELEV DN LIMIT uSENSE → 2
+24V RET → 3
LL1 ELEV UP LIMIT ANODE → 4
LL1 ELEV UP LIMIT uSENSE → 5
+24V RET → 6
SHLD → 7
LL2 ELEV DN LIMIT ANODE → 8
LL2 ELEV DN LIMIT uSENSE → 9
+24V RET → 10
LL2 ELEV UP LIMIT ANODE → 11
LL2 ELEV UP LIMIT uSENSE → 12
+24V RET → 13
SHLD → 14
LL3 ELEV DN LIMIT ANODE → 15
LL3 ELEV DN LIMIT uSENSE → 16
+24V RET → 17
LL3 ELEV UP LIMIT ANODE → 18
LL3 ELEV UP LIMIT uSENSE → 19
+24V RET → 20
SHLD → 21
J6018
LL1 ELEV ENCODER A → 1
LL1 ELEV ENCODER /A → 2
LL1 ELEV ENCODER B → 3
LL1 ELEV ENCODER /B → 4
LL1 ELEV ENCODER INDEX → 5
LL1 ELEV ENCODER /INDEX → 6
LL1 ELEV ENCODER +24V → 7
LL1 ELEV ENCODER +24V RET → 8
SHLD → 9
LL2 ELEV ENCODER A → 10
LL2 ELEV ENCODER /A → 11
LL2 ELEV ENCODER B → 12
LL2 ELEV ENCODER /B → 13
LL2 ELEV ENCODER INDEX → 14
LL2 ELEV ENCODER /INDEX → 15
LL2 ELEV ENCODER +24V → 16
LL2 ELEV ENCODER +24V RET → 17
SHLD → 18
LL3 ELEV ENCODER A → 19
LL3 ELEV ENCODER /A → 20
LL3 ELEV ENCODER B → 21
LL3 ELEV ENCODER /B → 22
LL3 ELEV ENCODER INDEX → 23
LL3 ELEV ENCODER /INDEX → 24
LL3 ELEV ENCODER +24V → 25
LL3 ELEV ENCODER +24V RET → 26
SHLD → 27
J6019
WAFER LIFT ENCODER A → 1
WAFER LIFT ENCODER /A → 2
WAFER LIFT ENCODER B → 3
WAFER LIFT ENCODER /B → 4
WAFER LIFT ENCODER INDEX → 5
WAFER LIFT ENCODER /INDEX → 6
WAFER LIFT ENCODER +24V → 7
WAFER LIFT ENCODER +24V RET → 8
SHLD → 9
J6020
CENTERING ENCODER A → 1
CENTERING ENCODER /A → 2
CENTERING ENCODER B → 3
CENTERING ENCODER /B → 4
CENTERING ENCODER INDEX → 5
CENTERING ENCODER /INDEX → 6
CENTERING ENCODER +24V → 7
CENTERING ENCODER +24V RET → 8
SHLD → 9
ARM ENCODER A → 10
ARM ENCODER /A → 11
ARM ENCODER B → 12
ARM ENCODER /B → 13
ARM ENCODER INDEX → 14
ARM ENCODER /INDEX → 15
ARM ENCODER +24V → 16
ARM ENCODER +24V RET → 17
SHLD → 18
WAFER TRANSPORT ENCODER A → 19
WAFER TRANSPORT ENCODER /A → 20
WAFER TRANSPORT ENCODER B → 21
WAFER TRANSPORT ENCODER /B → 22
WAFER TRANSPORT ENCODER INDEX → 23
WAFER TRANSPORT ENCODER /INDEX → 24
WAFER TRANSPORT ENCODER +24V → 25
WAFER TRANSPORT ENCODER +24V RET → 26
SHLD → 27
REFER SCHEM E84001280 (E1000), E84001480 (VISion)
J6228
ENCODER A → 1
ENCODER/A → 2
ENCODER B → 3
ENCODER/B → 4
ENCODER INDEX → 5
ENCODER/INDEX → 6
+24V → 7
+24V RET → 8
GND → 9
H AXIS
ENCODER A → 10
ENCODER/A → 11
ENCODER B → 12
ENCODER/B → 13
ENCODER INDEX → 14
ENCODER/INDEX → 15
+24V → 16
+24V RET → 17
GND → 18
I AXIS
ENCODER A → 19
ENCODER/A → 20
ENCODER B → 21
ENCODER/B → 22
ENCODER INDEX → 23
ENCODER/INDEX → 24
+24V → 25
+24V RET → 26
GND → 27
J AXIS
REVISIONS
ZONE
LTR
DESCRIPTION
DATE
APPROVED
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SCHEMATIC DIAGRAM
WAFER HANDLER SERVO CONTROL
E100214-02
RASTER