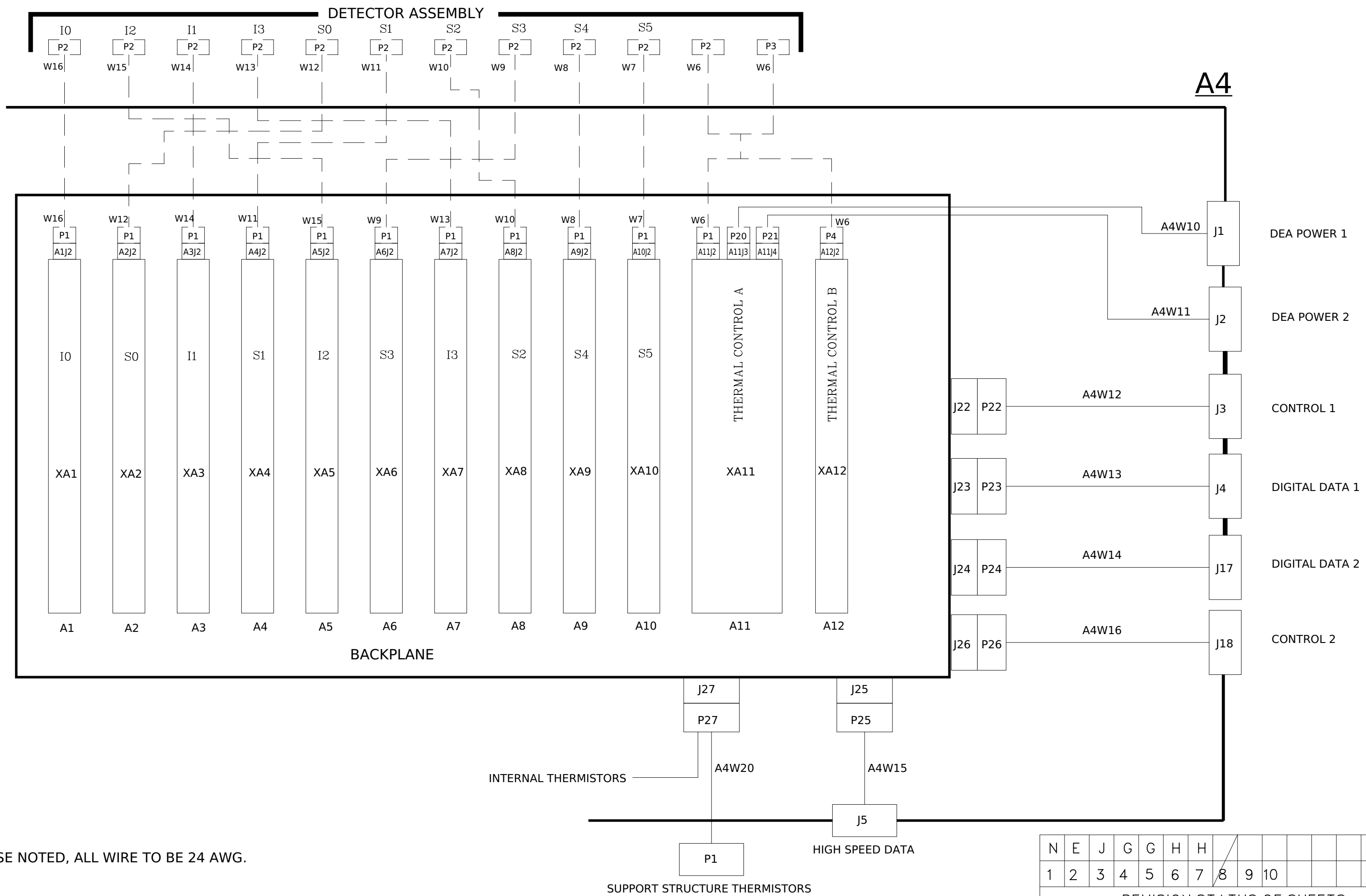


REF DES	DESCRIPTION
A1-10 A11-12	DEA SUBGROUP THERMAL CONTROL

CONNECTOR KEYING		
REF DES		POSITION
A1	XA1	A 2
A2	XA2	A 2
A3	XA3	A 2
A4	XA4	A 2
A5	XA5	A 2
A6	XA6	A 2
A7	XA7	A 2
A8	XA8	A 2
A9	XA9	A 2
A10	XA10	A 2
A11	XA11	B 3
A12	XA12	C 4

REVISIONS					
REV.	ECO NO.	DESCRIPTION	CHECKED	APPROVED	DATE
K	36-698	ADD SHIELD TO A4A1-A10J2	FJK	RFG	7/23/96
L	36-700	ADDED PWR-SAFE TO A4A11-A12J2			
M	36-718	CHANGE DATA CABLES	FJK	RFG	8/9/96
N	36-762	CHANGE A4J1-10. ADD ASSY P/N'S.			



NOTES

- UNLESS OTHERWISE NOTED, ALL WIRE TO BE 24 AWG.
- LEGEND:
 - 24 AWG TWISTED SHIELDED PAIR
 - 24 AWG TWISTED PAIR
- EXTERNAL CABLES W6-W16 ARE DEFINED IN DRAWING 36-03020.01.

N	E	J	G	G	H	H														
1	2	3	4	5	6	7	8	9	10											

REVISION STATUS OF SHEETS			
MASSACHUSETTS INSTITUTE OF TECHNOLOGY CENTER FOR SPACE RESEARCH CAMBRIDGE, MA 02139			
INTERCONNECTION DIAGRAM - DETECTOR ELECTRONICS ASSY			
SIZE	CAGE CODE	DWG. NO.	REV.
C	80230	36-03021.02	N
SCALE	NONE		SHEET 1 OF 7

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE: ANGLES ± 1° 3 PLACE DECIMALS ± .005 2 PLACE DECIMALS ± .01		NAME	DATE
MATERIAL		DRAWN M. Lyons	13 Apr 95
NEXT ASSEMBLY		CHECKED F. Kasparian	19 May 95
USED ON		APPROVED R.F. Goetze	19 May 95
APPLICATION		RELEASED D. Gage	19 May 95
INTERPRET DIMENSIONS AND TOLERANCES IAW ANSI Y14.5M-1982		WEIGHT	

REVISIONS					
REV.	ECO NO.	DESCRIPTION	CHECKED	APPROVED	DATE
		SEE SHEET 1			

(SND15MR570T2G) A11J3 P20 (311P409-2S-B-12)

- | | | |
|----|----|-----------------------------|
| 1 | 1 | NOT USED |
| 2 | 2 | (J1-A) DEA +6VDC "A" |
| 3 | 3 | (J1-F) DEA ±6VDC "A" RTN |
| 4 | 4 | (J1-L) DEA -6VDC "A" |
| 5 | 5 | (J1-B) DEA +6VDC "A" |
| 6 | 6 | (J1-G) DEA ±6VDC "A" RTN |
| 7 | 7 | (J1-M) DEA -6VDC "A" |
| 8 | 8 | NOT USED |
| 9 | 9 | (J1-R) DEA +15.5VDC "A" |
| 10 | 10 | (J1-T) DEA ±15.5VDC "A" RTN |
| 11 | 11 | (J1-S) DEA -15.5VDC "A" |
| 12 | 12 | (J1-V) DEA +24VDC "A" |
| 13 | 13 | (J1-W) DEA 24VDC "A" RTN |
| 14 | 14 | (J1-X) DEA +28VDC "A" |
| 15 | 15 | (J1-U) DEA 28VDC "A" RTN |

J1 (M27656T2321P)

- | | |
|---|-------------------------------|
| A | (P20-2) DEA +6VDC "A" |
| F | (P20-3) DEA ±6VDC "A" RTN |
| L | (P20-4) DEA -6VDC "A" |
| B | (P20-5) DEA +6VDC "A" |
| G | (P20-6) DEA ±6VDC "A" RTN |
| M | (P20-7) DEA -6VDC "A" |
| C | DEA +6VDC "A" |
| H | DEA ±6VDC "A" RTN |
| N | DEA -6VDC "A" |
| D | DEA +6VDC "A" |
| J | DEA ±6VDC "A" RTN |
| P | DEA -6VDC "A" |
| R | (P20-9) DEA +15.5VDC "A" |
| T | (P20-10) DEA ±15.5VDC "A" RTN |
| S | (P20-11) DEA -15.5VDC "A" |
| V | (P20-12) DEA +24VDC "A" |
| W | (P20-13) DEA 24VDC "A" RTN |
| X | (P20-14) DEA +28VDC "A" |
| U | (P20-15) DEA 28VDC "A" RTN |
| E | NOT USED |
| K | NOT USED |

W10 DEA POWER 1
(ASSY 36-30204)

(SND15M5R702G) A11J4 P21 (311P409-2S-B-12)

- | | | |
|----|----|-----------------------------|
| 1 | 1 | NOT USED |
| 2 | 2 | (J2-A) DEA +6VDC "B" |
| 3 | 3 | (J2-F) DEA ±6VDC "B" RTN |
| 4 | 4 | (J2-L) DEA -6VDC "B" |
| 5 | 5 | (J2-B) DEA +6VDC "B" |
| 6 | 6 | (J2-G) DEA ±6VDC "B" RTN |
| 7 | 7 | (J2-M) DEA -6VDC "B" |
| 8 | 8 | NOT USED |
| 9 | 9 | (J2-R) DEA +15.5VDC "B" |
| 10 | 10 | (J2-T) DEA ±15.5VDC "B" RTN |
| 11 | 11 | (J2-S) DEA -15.5VDC "B" |
| 12 | 12 | (J2-V) DEA +24VDC "B" |
| 13 | 13 | (J2-W) DEA 24VDC "B" RTN |
| 14 | 14 | (J2-X) DEA +28VDC "B" |
| 15 | 15 | (J2-U) DEA 28VDC "B" RTN |

J2 (M27656T2321PA)

- | | |
|---|-------------------------------|
| A | (P21-2) DEA +6VDC "B" |
| F | (P21-3) DEA ±6VDC "B" RTN |
| L | (P21-4) DEA -6VDC "B" |
| B | (P21-5) DEA +6VDC "B" |
| G | (P21-6) DEA ±6VDC "B" RTN |
| M | (P21-7) DEA -6VDC "B" |
| C | DEA +6VDC "B" |
| H | DEA ±6VDC "B" RTN |
| N | DEA -6VDC "B" |
| D | DEA +6VDC "B" |
| J | DEA ±6VDC "B" RTN |
| P | DEA -6VDC "B" |
| R | (P21-9) DEA +15.5VDC "B" |
| T | (P21-10) DEA ±15.5VDC "B" RTN |
| S | (P21-11) DEA -15.5VDC "B" |
| V | (P21-12) DEA +24VDC "B" |
| W | (P21-13) DEA 24VDC "B" RTN |
| X | (P21-14) DEA +28VDC "B" |
| U | (P21-15) DEA 28VDC "B" RTN |
| E | NOT USED |
| K | NOT USED |

W11 DEA POWER 2
(ASSY 36-30205)

(SND9F3S0T2G) J25 P25 (311P409-1P-B-12)

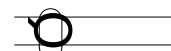
- | | | |
|---|---|----------------|
| 1 | 1 | (J5-1) PIXCLKP |
| 2 | 2 | (J5-2) PIXCLKN |
| 3 | 3 | (J5-3) SHIELD |
| 4 | 4 | (J5-4) PIXDATP |
| 5 | 5 | (J5-5) PIXDATN |
| 6 | 6 | (J5-6) SHIELD |
| 7 | 7 | (J5-7) PIXSYNP |
| 8 | 8 | (J5-8) PIXSYNN |
| 9 | 9 | (J5-9) SHIELD |

J5 (311P409-1S-B-12)

- | | |
|---|-----------------|
| 1 | (P25-1) PIXCLKP |
| 2 | (P25-2) PIXCLKN |
| 3 | (P25-3) SHIELD |
| 4 | (P25-4) PIXDATP |
| 5 | (P25-5) PIXDATN |
| 6 | (P25-6) SHIELD |
| 7 | (P25-7) PIXSYNP |
| 8 | (P25-8) PIXSYNN |
| 9 | (P25-9) SHIELD |

W15 HIGH SPEED DATA
(ASSY 36-30209)

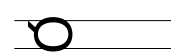
24 AWG TWISTED SHIELDED PAIR



20 AWG TWISTED TRIPLET



20 AWG TWISTED PAIR



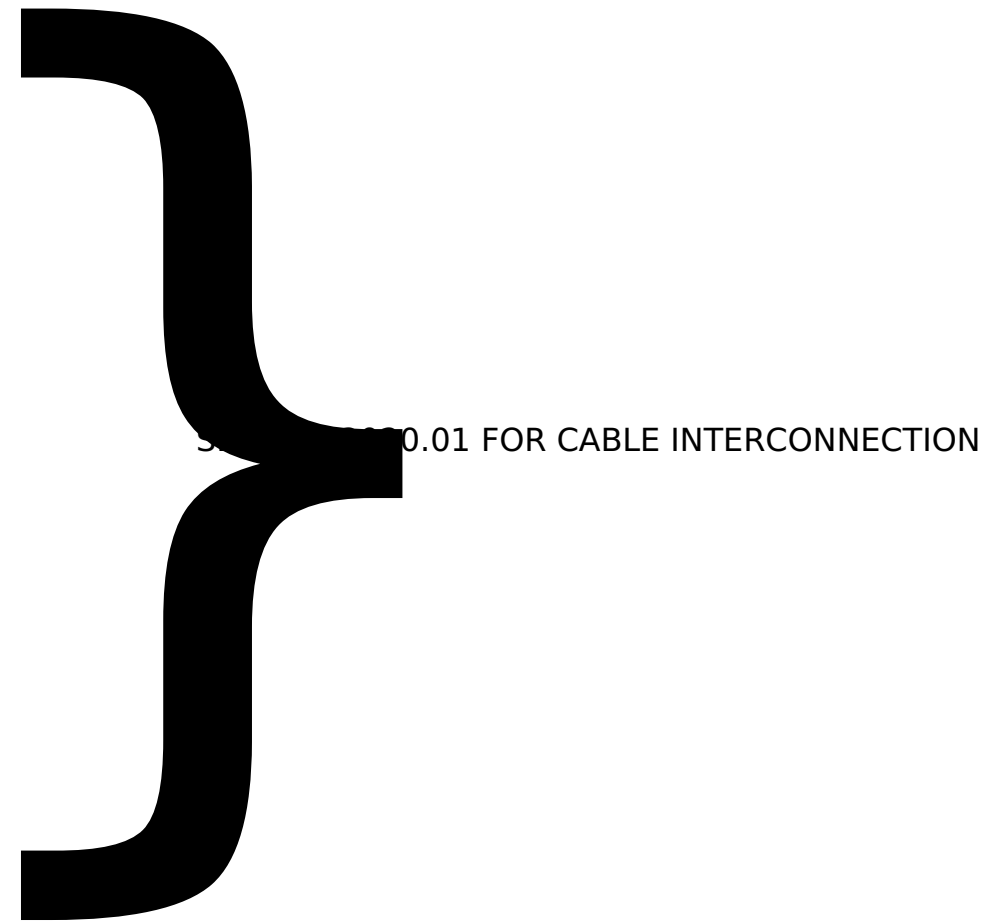
SIZE	CAGE CODE	DWG. NO.	REV.
C	80230	36-03021.02	E
SCALE	NONE	SHEET	2

REVISIONS					
REV.	ECO NO.	DESCRIPTION	CHECKED	APPROVED	DATE
		SEE SHEET 1			

(KA41/127BPV30MCTH) A4A1J2 THRU
A4A10J2 P1

P1/IA Phase-1 Imaging Array	3	3
P2/IA Phase-2 Imaging Array	2	2
P3/IA Phase-3 Imaging Array	1	1
P1/FS Phase-1 Frame Store	8	8
P2/FS Phase-2 Frame Store	7	7
P3-FS Phase-3 Frame Store	6	6
P1/OR-AC Phase-1 Output Registers A & C	17	17
P1/OR-BD Phase-1 Output Registers B & D	16	16
P2/OR-AC Phase-2 Output Registers A & C	18	18
P2/OR-BD Phase -2 Output Registers B & D	19	19
P3-OR-ABCD Phase-3 Output Registers A-D	20	20
OG-ABCD Output Gates A-D	26	26
RG-ABCD Reset Gates A-D	21	21
RD-ABCD Reset Diodes A-D	24	24
SCP Scupper	25	25
DR-A Drain A	14	14
DR-B Drain-B	13	13
DR-C Drain-C	12	12
DR-D Drain-D	11	11
OUT-A Video Output-A	33	33
OUT-B Video Output B	35	35
OUT-C Video Output-C	37	37
OUT-D Video Output-D	39	39
RET-A Video Return-A	34	34
RET-B Video Return-B	36	36
RET-C Video Return-C	38	38
RET-D Video Return-D	40	40
SUB1 Chip Substrate 1	4	4
SUB2 Chip Substrate 2	9	9
SUB3 Chip Substrate 3	22	22
Bj Back Junction	29	29
GND	5	5
GND	10	10
GND	15	15
GND	23	23
OPEN	27	27
OPEN	28	28
OPEN	30	30
OPEN	31	31
GND	32	32
GND	41	41

VIDEO



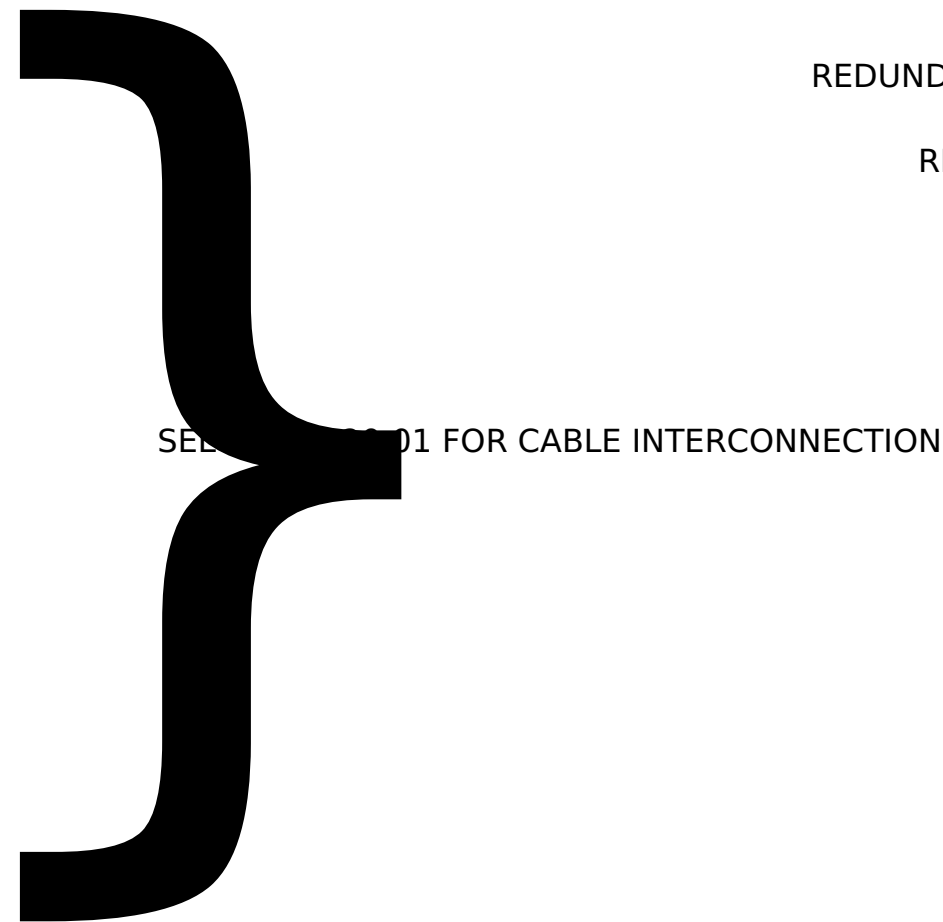
SEE SHEET 01 FOR CABLE INTERCONNECTION

SHIELD

(KA41/127BPV30MCTH) A4A11J2 P1

(P2-11) DS1IN	1	1
(P2-10) COMMON	2	2
(P4-3) PWR-SAFE	3	3
OPEN	4	4
OPEN	5	5
(P3-1) [BAKEOUT] HR600POW	6	6
(P3-2) HEATERCOM A	7	7
(P3-12) HR602 & HR603POW	8	8
(P3-4) RT600 BLUE	9	9
(P3-5) RT600 GOLD	10	10
(P3-15) RT600 GOLD	11	11
(P3-7) RT700 BLUE	12	12
(P3-8) RT700 GOLD	13	13
(P3-18) RT700 GOLD	14	14
CHASSIS GND	15	15
(P4-16) HKVOUT	16	16
(P4-17) HKADD2	17	17
(P4-18) HKADD1	18	18
(P4-19) HKADD0	19	19
(P4-20) HEN40	20	20
(P4-21) HEN32	21	21
(P4-22) HEN24	22	22
(P4-23) HEN16	23	23
(P4-24) HEN8	24	24
(P4-25) HEN0	25	25
(P4-26) FLIP-P1TOB	26	26
(P4-27) FLIP-P2TOB	27	27
(P4-28) FLIP-P3TOB	28	28
(P4-29) FLIP-P4TOB	29	29
(P4-30) FLIP-P5TOB	30	30
(P4-31) FLIPTOB	31	31
(P4-32) EGND	32	32
(P4-33) DEA+6VDCB	33	33
(P4-34) DEA+6VDCB	34	34
(P4-35) DEA-6VDCD	35	35
(P4-36) EGND	36	36
(P4-37) DEA+15.5VDCB	37	37
(P4-38) DEA-15.5VDCB	38	38
(P4-39) DEA+28VDCB	39	39
(P4-40) DEA+28VDCB	40	40
(P4-41) EGND	41	41

HEATER CONTROL AND INTERFACE

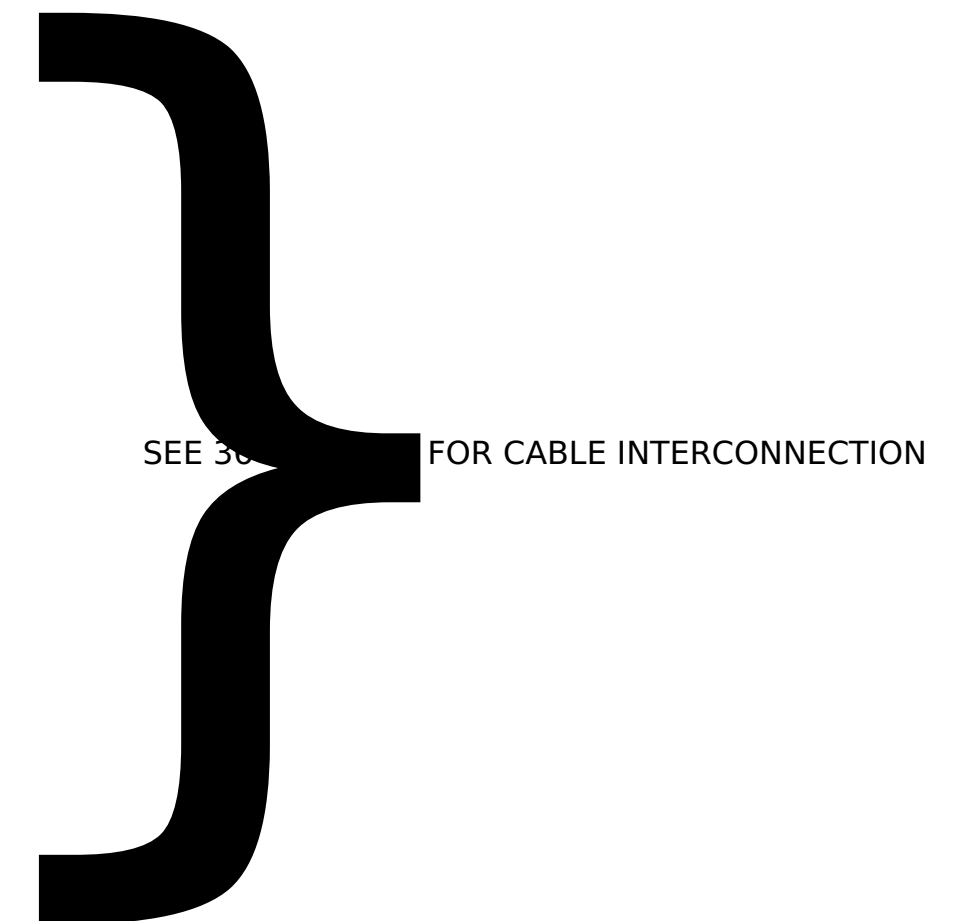


SEE SHEET 01 FOR CABLE INTERCONNECTION

(KA41/127BPV30MCTH) A4A12J2 P4

(P2-21) DS2IN	1	1
(NOT USED) COMMON	2	2
(P1-3) PWR-SAFE	3	3
OPEN	4	4
OPEN	5	5
(P3-13) [BAKEOUT] HR601POW	6	6
(P3-14) HEATERCOM B	7	7
(P3-3) HR604 & HR605POW	8	8
(P3-16) RT601 BLUE	9	9
(P3-17) RT601 GOLD	10	10
(P3-6) RT601 GOLD	11	11
(P3-19) RT701 BLUE	12	12
(P3-20) RT701 GOLD	13	13
(P3-9) RT701 GOLD	14	14
CHASSIS GND	15	15
(P1-16) HKVOUT	16	16
(P1-17) HKADD2	17	17
(P1-18) HKADD1	18	18
(P1-19) HKADD0	19	19
(P1-20) HEN40	20	20
(P1-21) HEN32	21	21
(P1-22) HEN24	22	22
(P1-23) HEN16	23	23
(P1-24) HEN8	24	24
(P1-25) HEN0	25	25
(P1-26) FLIP-P1TOB	26	26
(P1-27) FLIP-P2TOB	27	27
(P1-28) FLIP-P3TOB	28	28
(P1-29) FLIP-P4TOB	29	29
(P1-30) FLIP-P5TOB	30	30
(P1-31) FLIPTOB	31	31
(P1-32) EGND	32	32
(P1-33) DEA+6VDCB	33	33
(P1-34) DEA+6VDCB	34	34
(P1-35) DEA-6VDCD	35	35
(P1-36) EGND	36	36
(P1-37) DEA+15.5VDCB	37	37
(P1-38) DEA-15.5VDCB	38	38
(P1-39) DEA+28VDCB	39	39
(P1-40) DEA+28VDCB	40	40
(P1-41) EGND	41	41

REDUNDANT {
REDUNDANT {



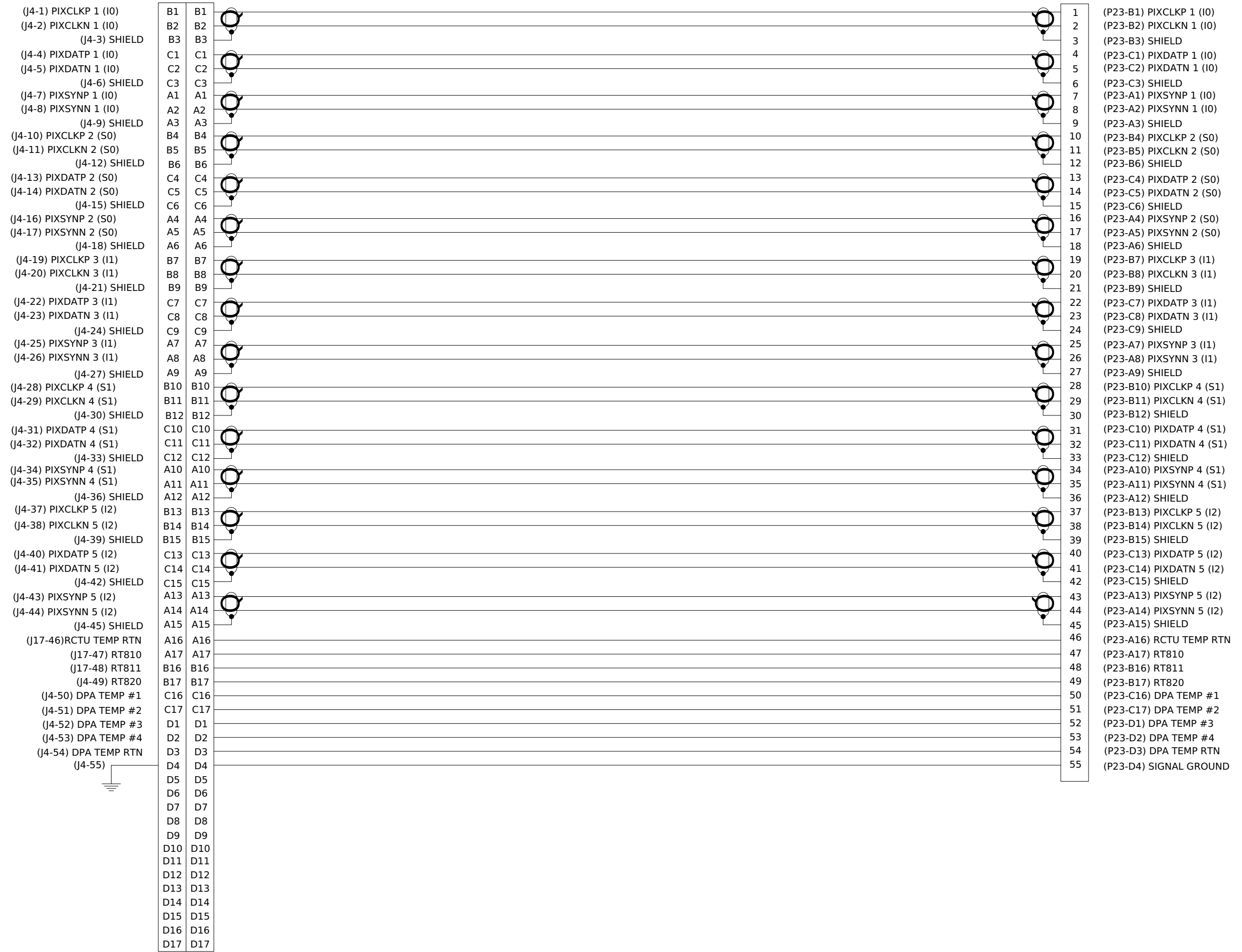
SEE SHEET 01 FOR CABLE INTERCONNECTION

SIZE	CAGE CODE	DWG. NO.	REV.
C	80230	36-03021.02	J
SCALE	SHEET 3		

REVISIONS					
REV.	ECO NO.	DESCRIPTION	CHECKED	APPROVED	DATE
		SEE SHEET 1			

(KA68/2545DEV31FDTAH) J23 P23 (KA68/254DPV32MRTH)

J4 (MS27656T17F35S)



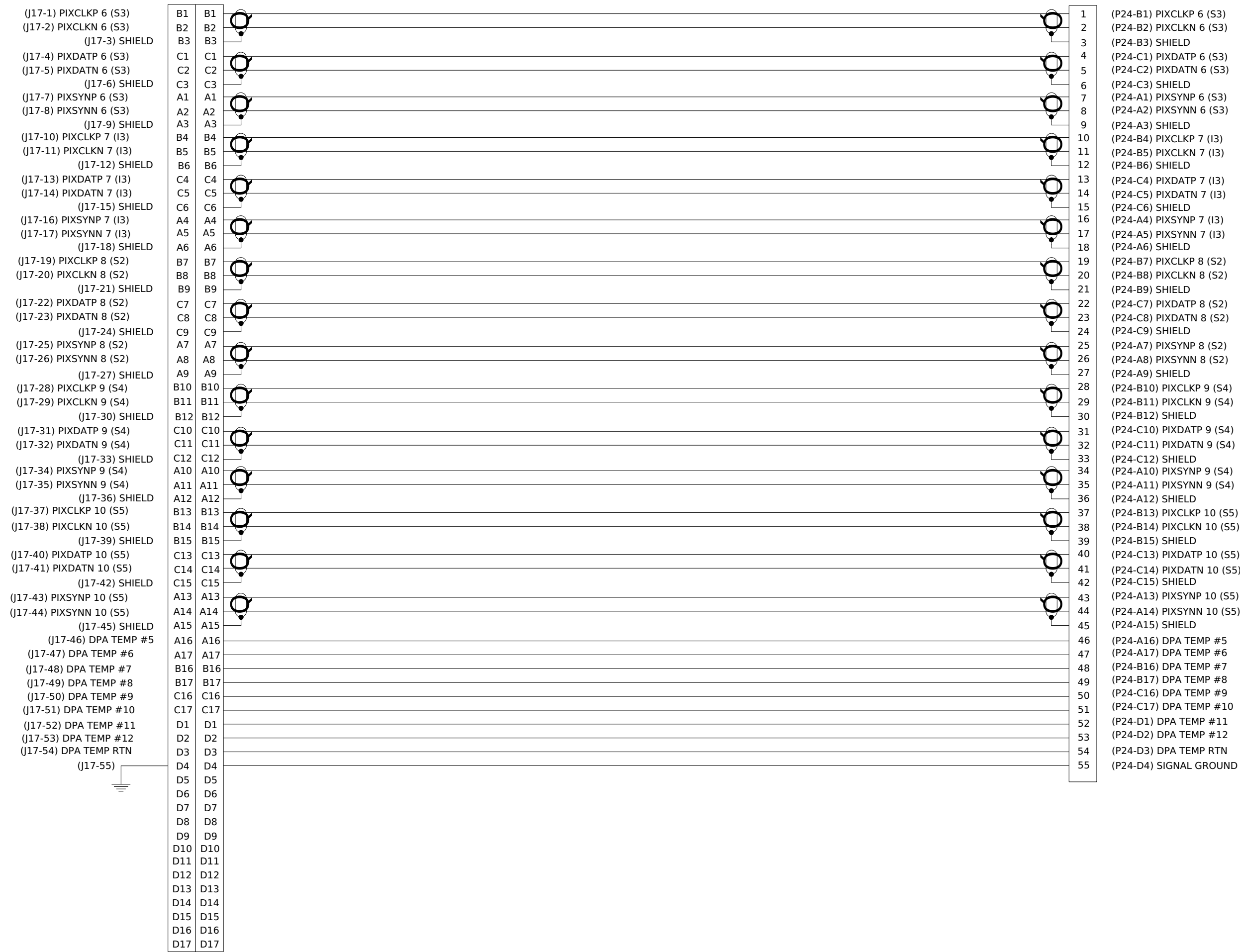
W13 DIGITAL DATA 1 (ASSY 36-30207)

SIZE	CAGE CODE	DWG. NO.	REV.
C	80230	36-03021.02	G
SCALE	NONE	SHEET	4

REVISIONS					
REV.	ECO NO.	DESCRIPTION	CHECKED	APPROVED	DATE
		SEE SHEET 1			

(KA68/254DEV31FDTAH) J24 P24 (KA68/254DPV32MRTH)

(MS27656T17F35SA) J17



W14 DIGITAL DATA 2 (ASSY 36-30208)

SIZE	CAGE CODE	DWG. NO.	REV.
C	80230	36-03021.02	G
SCALE	NONE	SHEET	5

REVISIONS					
REV.	ECO NO.	DESCRIPTION	CHECKED	APPROVED	DATE
		SEE SHEET 1			

(KA48/254DEV31FDTAH) J22 P22 (KA48/254DPV32MRTH)

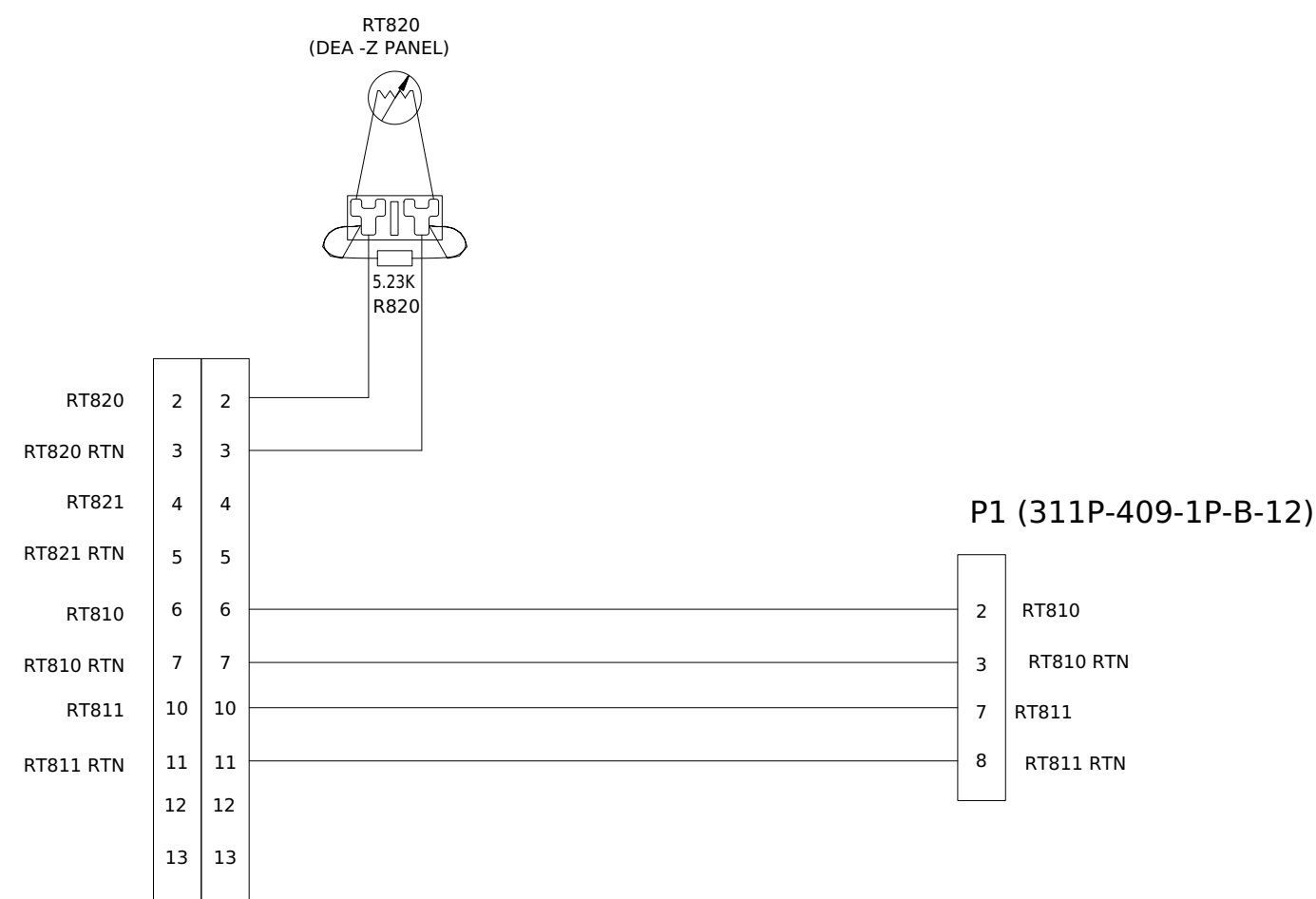
(MS27656T13F35S) J3

- (J3-1) CSCKP_A
- (J3-2) CSCKN_A
- (J3-3) SHIELD
- (J3-4) CMDATN_A
- (J3-5) CMDATP_A
- (J3-6) SHIELD
- (J3-7) STDATP_A
- (J3-8) STDATN_A
- (J3-9) SHIELD
- (J3-10) RESETP_A
- (J3-11) RESETN_A
- (J3-12) SHIELD
- (J3-13) BEPSEL_A
- (J3-15) CK100KP_A
- (J3-16) CK100KN_A
- (J3-17) SHIELD
- (J3-18) CK64MP_A
- (J3-19) CK64MN_A
- (J3-20) SHIELD
- (J3-21) GROUND
- (J3-22) DPAHKS_V_A

A1	A1
B1	B1
A2	A2
B2	B2
A3	A3
B3	B3
A4	A4
B4	B4
A5	A5
B5	B5
A6	A6
B6	B6
A7	A7
B7	B7
A8	A8
B8	B8
A9	A9
B9	B9
A10	A10
B10	B10
A11	A11
B11	B11
A12	A12
B12	B12
C1	C1
C2	C2
C3	C3
C4	C4
C5	C5
C6	C6
C7	C7
C8	C8
C9	C9
C10	C10
C11	C11
C12	C12
D1	D1
D2	D2
D3	D3
D4	D4
D5	D5
D6	D6
D7	D7
D8	D8
D9	D9
D10	D10
D11	D11
D12	D12

- (P22-A1) CSCKP_A
- (P22-B1) CSCKN_A
- (P22-A2) SHIELD
- (P22-B2) CMDATN_A
- (P22-A3) CMDATP_A
- (P22-B3) SHIELD
- (P22-A4) STDATP_A
- (P22-B4) STDATN_A
- (P22-A5) SHIELD
- (P22-B5) RESETP_A
- (P22-A6) RESETN_A
- (P22-B6) SHIELD
- (P22-A7) BEPSEL_A
- SPARE
- (P22-B8) CK100KP_A
- (P22-B8) CK100KN_A
- (P22-A9) SHIELD
- (P22-B9) CK64MP_A
- (P22-A10) CK64MN_A
- (P22-A11) SHIELD
- (P22-C1) GROUND
- (P22-C2) DPAHKS_V_A

W12 CONTROL 1 (ASSY 36-30206)



(SND15M3S0T2G) J27 P27 (311P409-2S-B-12)

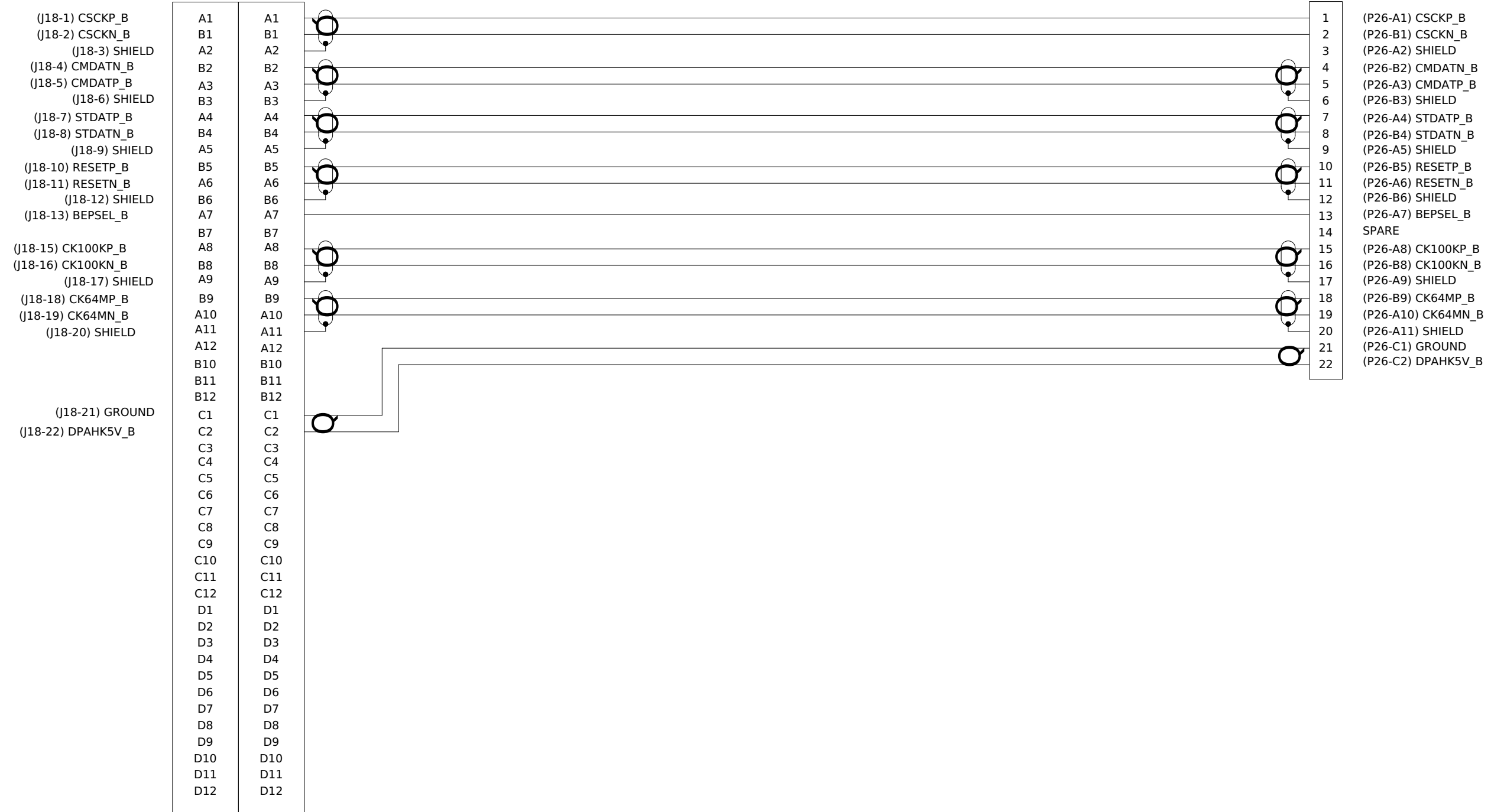
W20 THERMISTORS (ASSY 36-30229)

SIZE	CAGE CODE	DWG. NO.	REV.
C	80230	36-03021.02	H
SCALE	NONE	SHEET	6

REVISIONS					
REV.	ECO NO.	DESCRIPTION	CHECKED	APPROVED	DATE
		SEE SHEET 1			

(KA48/254DEV31FDTAH) J26 P26 (KA48/254DPV32MRTH)

(MS27656T13F35SA) J18



W16 CONTROL 2
(ASSY 36-30215)

SIZE	CAGE CODE	DWG. NO.	REV.
C	80230	36-03021.02	H
SCALE	NONE	SHEET	7