

Production Status

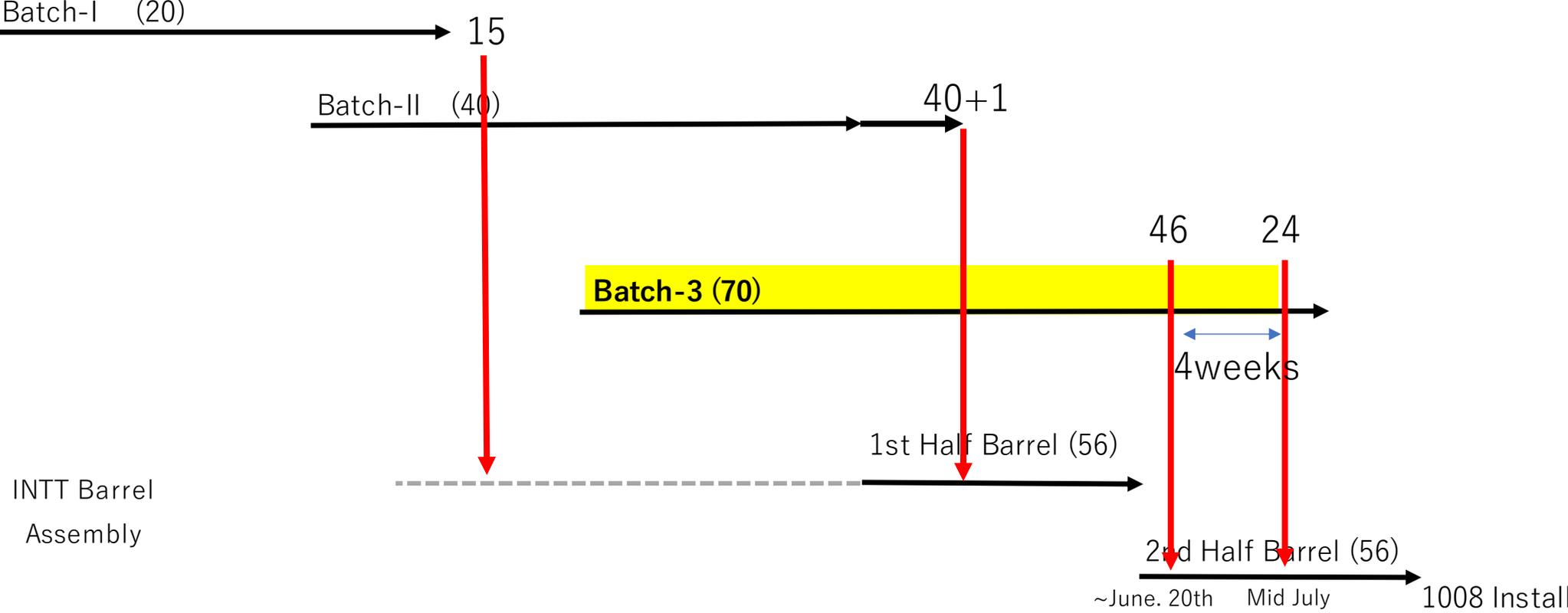
RIKEN/RBRC

Itaru Nakagawa

Bus Extender Production Batch-II, III

Schedule

2021 11 12 2022 1 2 3 4 5 6 7 8 9



| | | | | |
|-------------------|----|----|-----|-----|
| Total Qty. in BNL | 15 | 56 | 102 | 126 |
|-------------------|----|----|-----|-----|

INTT Production Status

Today

* Beyond 112 are spares

| 2022 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Qty* | Status |
|------------------|-------------|-------------|------------|-------------------|-------------|-------------|---|------------------|------|------------|
| Silicon | | | | | | | | | 135 | Done |
| HDI | | | | | | | | | 176 | Done |
| Stave | | | | | | | | | 204 | Done |
| Bus Extender | | Batch-1(20) | | | Batch-2(40) | | | | 130 | Production |
| | | | Contract | | | | | Batch-3(70) | | |
| Conversion Cable | Prototype-1 | | Contract | Prototype-2 | | | | | 130 | Prototype |
| | | | | | Test | | | Production (130) | | |
| Beam Clock Board | Design | | Public bid | Preproduction(2) | | Test | | | 20 | Prototype |
| | | | | Parts procurement | | fabrication | | Production(18) | | |
| Barrel Assembly | | | | | | | | | | |

- 47 BEX are to be delivered in week of June 20th.
- Finalize design of the conversion cable for production.
- To be delivered beam clock board by the end of of June. Cables need to be prepared

Exporting μ -Coax Prototype-II to BNL



- Paper works are done.
- Arranged pick up next Tuesday 6/14

ROC Boards Export

| index | shipped | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | C3 | D1 | D2 | D3 |
|-------|---------|--------|--------|--------|------|------|------|------|----|----|--------|------|----|
| 1 | NE0 | Yellow | | | | | | | | | Yellow | | |
| 2 | NE1 | | | | | | | | | | | | |
| 3 | NE2 | | | | | | | | | | | | |
| 4 | NE3 | | | | Pink | Pink | Pink | | | | | | |
| 5 | NE4 | | | | | | | | | | | | |
| 6 | NE5 | | | | | | | | | | Pink | | |
| 7 | SW5 | | | | | | | | | | | | |
| 8 | NW1 | | | | | | | | | | | | |
| 9 | NW2 | | | | | | | | | | | | |
| 10 | NW3 | | | Yellow | | | | | | | Yellow | | |
| 11 | NW4 | | | | Pink | Pink | | Pink | | | Pink | Pink | |
| 12 | SE0 | | | | | | | | | | | | |
| 13 | SE1 | | | | | | | | | | | | |
| 14 | SE2 | | | | | | | | | | | | |
| 15 | SE3 | | | | | | | | | | | | |
| 16 | SE4 | | Yellow | | | | | | | | Yellow | | |
| 17 | 29 | | | | | | | | | | | | |



| index | packed | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | C3 | D1 | D2 | D3 |
|-------|--------|----|------|--------|----|----|------|----|----|----|------|------|--------|
| 1 | ROC7 | | Pink | Pink | | | Pink | | | | Pink | Pink | Yellow |
| 2 | ROC9 | | | Yellow | | | | | | | | | |

6/14 Regulator Upgrade & DF18 Replacement

| | | |
|---------|-----------|--------------------------------|
| class 1 | 11 | class 1 → All good! |
| class 2 | 5 | class 2 → Bad port less than 2 |
| class 3 | 3 | class 3 → Bad port more than 3 |

Shipped to BNL already

6/14 Shipping to BNL (➡ 5 good ROCs + *NE5)

*NE5 has port which doesn't latch data fiber

BNL suppose to have 6+5=11 class 1 ROCs. (Goal is 16 Class-1 ROCs)

BCDB Update

Custom Made Beam Clock Cable



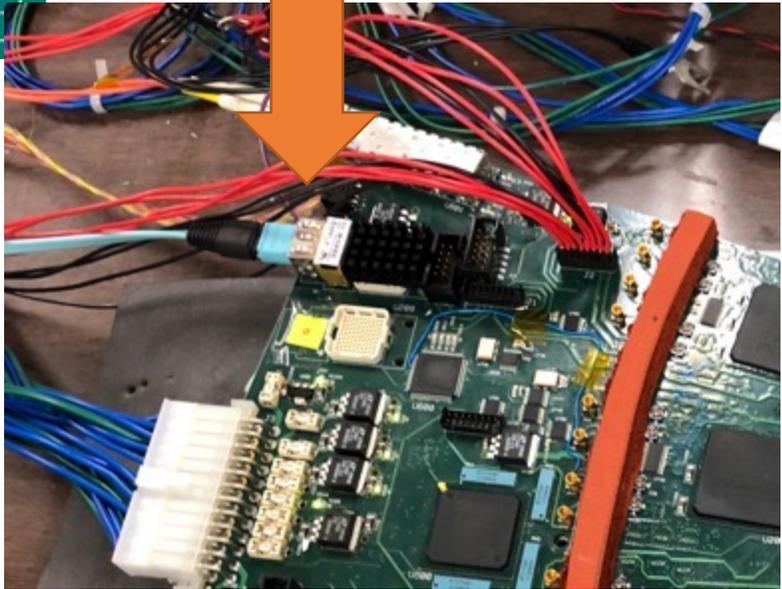
16+8spare (24 total) cables are to be made by Hayashi REPIC co.



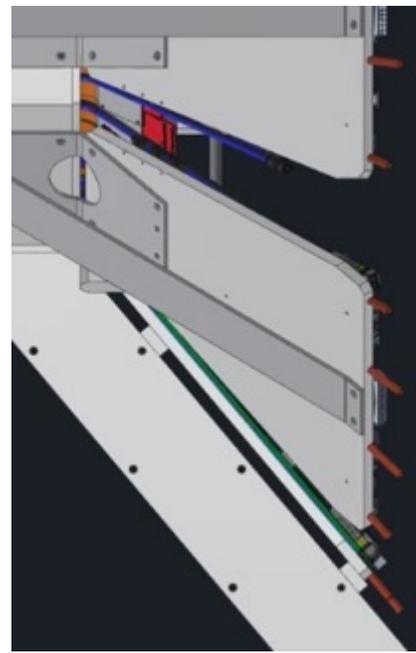
x2



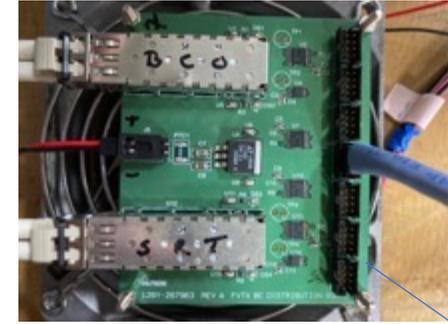
RJ45 Category 5
LAN Connector (female)



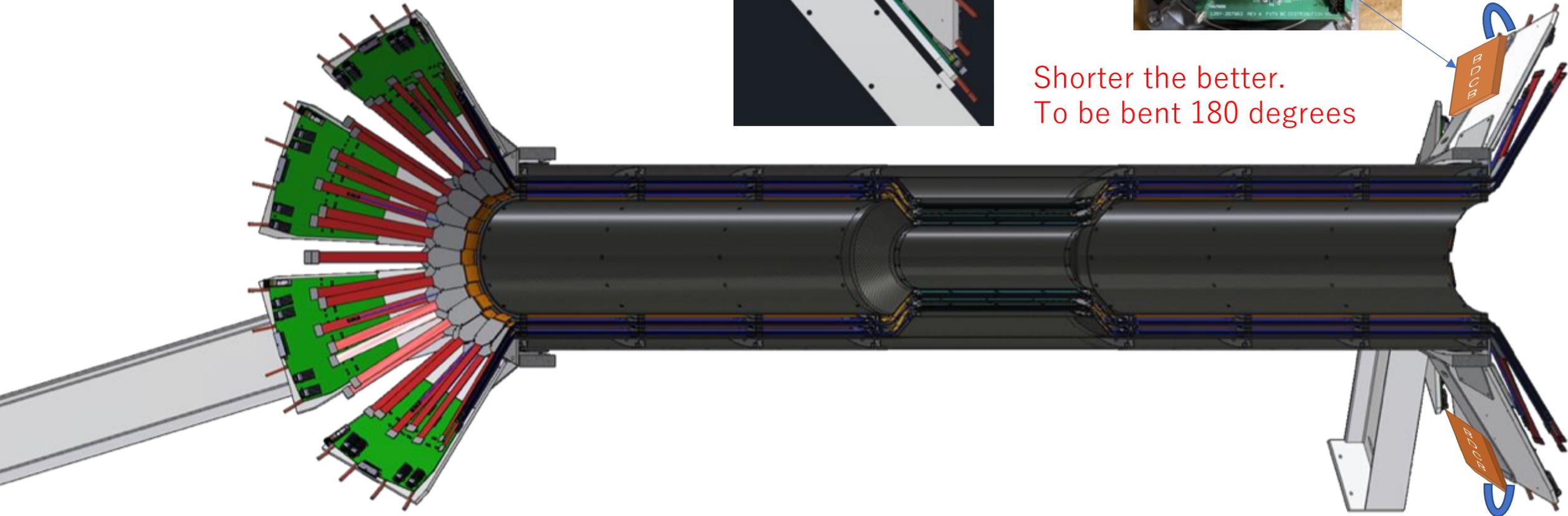
BCDB Location?



Takashi's Idea

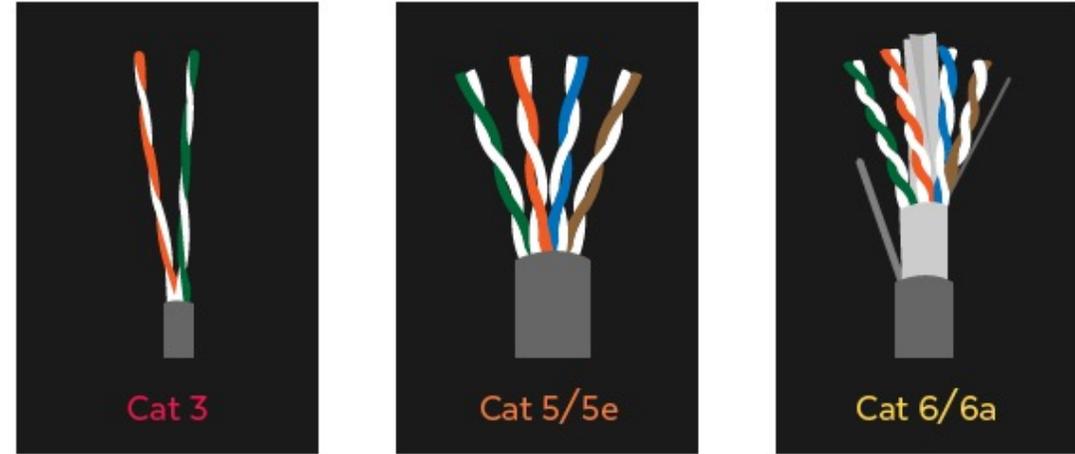


Shorter the better.
To be bent 180 degrees



Ethernet Cable Category

Category Cable Wiring



Cat5



Cat6



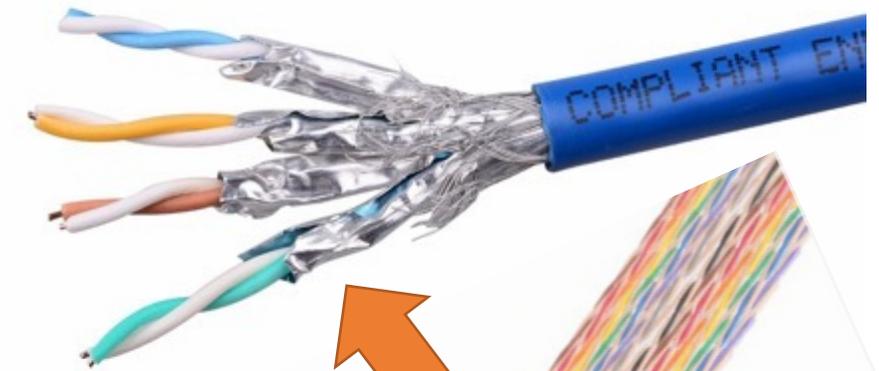
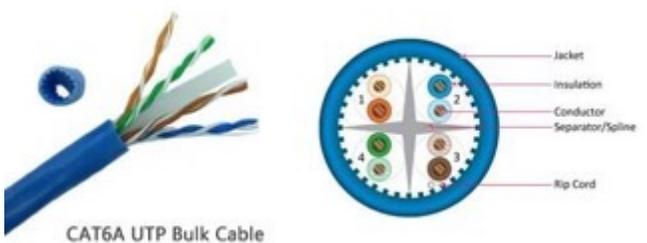
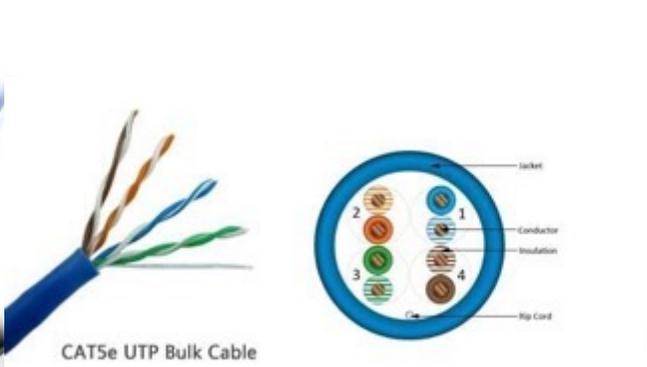
Cat7



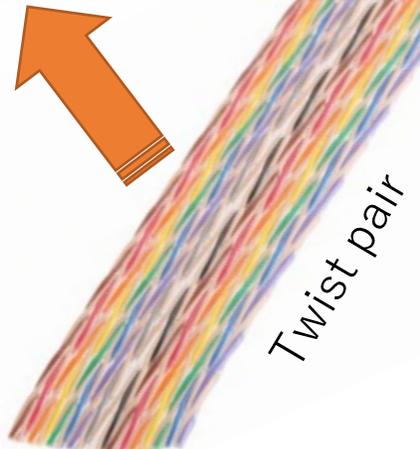
Cat8



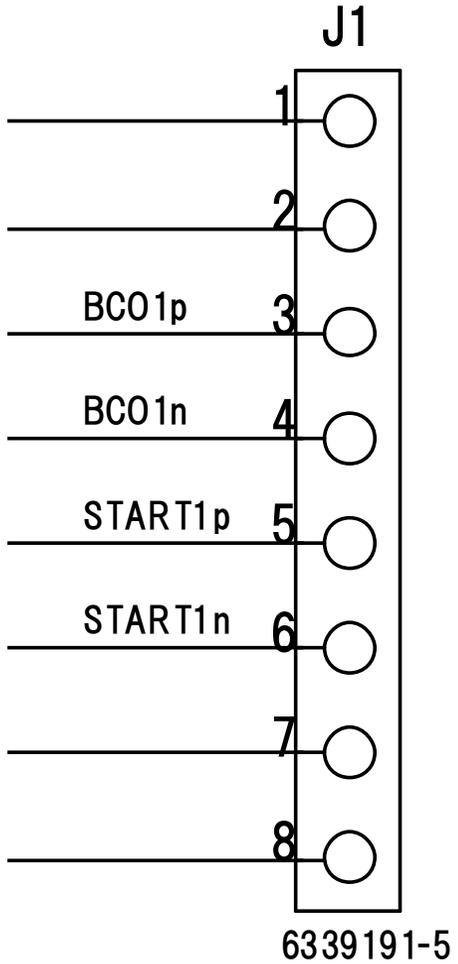
Category-8



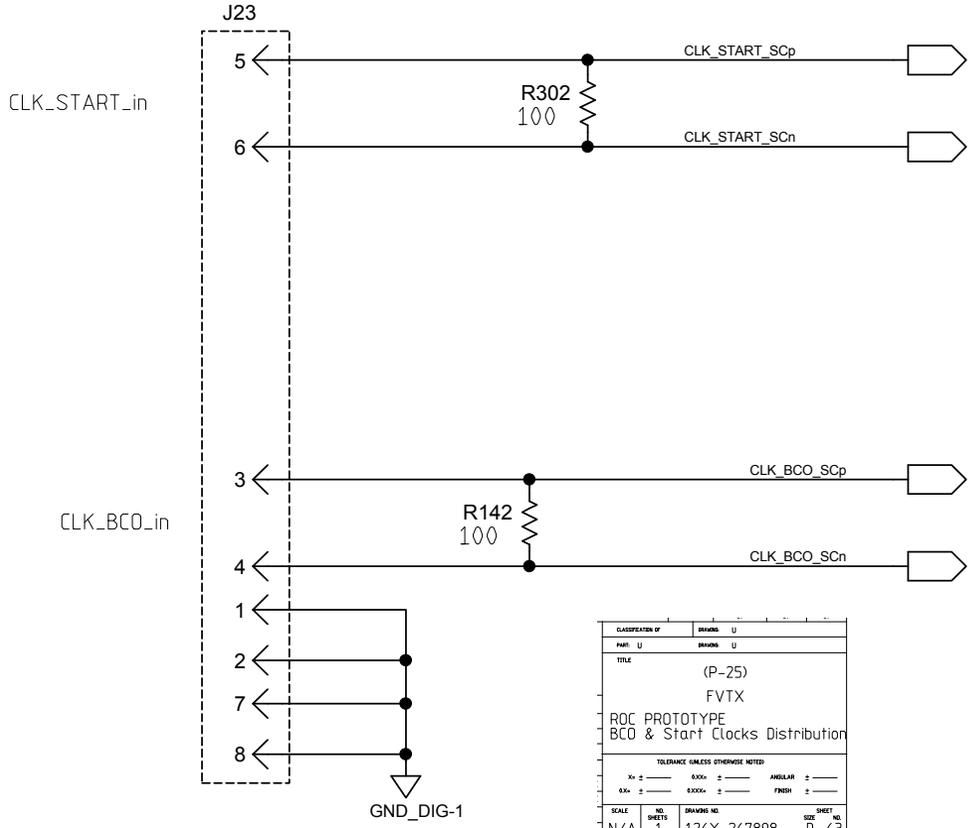
Better shielded



BCDB Cable Channel Map



BCDB Side



ROC Side

| | | |
|-----------------------------------|-------|----------------|
| CLASSIFICATION OF | GROUP | U2 |
| PANEL U2 | GROUP | U2 |
| TITLE | | |
| (P-25) | | |
| FVTX | | |
| ROC PROTOTYPE | | |
| BCO & Start Clocks Distribution | | |
| TOLERANCE UNLESS OTHERWISE NOTED: | | |
| X1 ± | 0.004 | ANGULAR ± |
| 0.004 | ± | FINISH ± |
| SCALE | NO. | DRAWING NO. |
| N/A | 1 | 126Y-267898 |
| | | SIZE SHEET NO. |
| | | D 63 |

BCO Cable Channel Map

| BCDB | ROC | Label |
|------|-----|--------|
| 1 | 1 | DGND |
| 2 | 2 | DGND |
| 3 | 3 | BCOp |
| 4 | 4 | BCOn |
| 5 | 5 | STARTp |
| 6 | 6 | STARTn |
| 7 | 7 | DGND |
| 8 | 8 | DGND |