

PX-7B

PX-7C

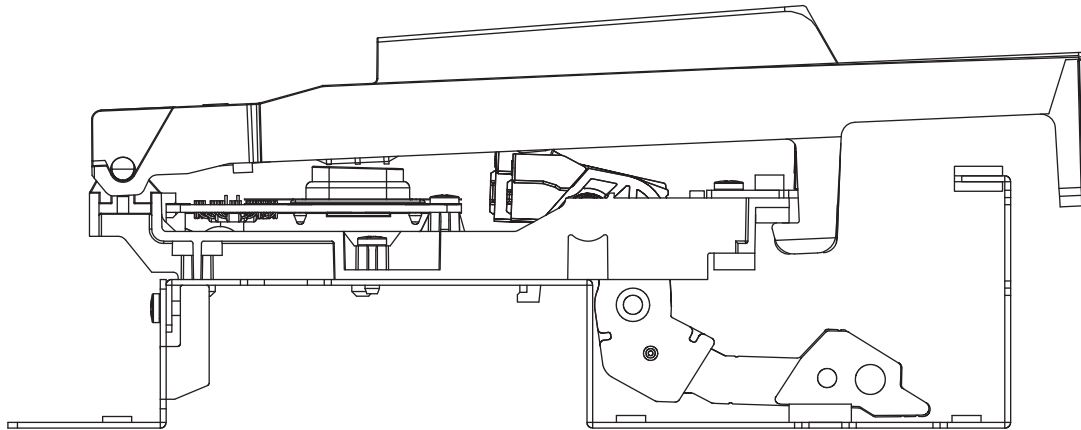
SERVICE NOTES

Issued by RJA

This service note contains information about repair parts and the repair method of the keyboard section.
For other sections of each model, please refer to each service note.

Table of Contents

| | |
|-----------------------------------|----|
| Keyboard Parts List (PX-7B) | 2 |
| Keyboard Parts List (PX-7C) | 3 |
| Keyboard Assembly Procedure | 4 |
| Circuit Board (Low, Mid) | 9 |
| Circuit Board (High) | 12 |
| Circuit Diagram (Low) | 14 |
| Circuit Diagram (Mid) | 16 |
| Circuit Diagram (High) | 18 |



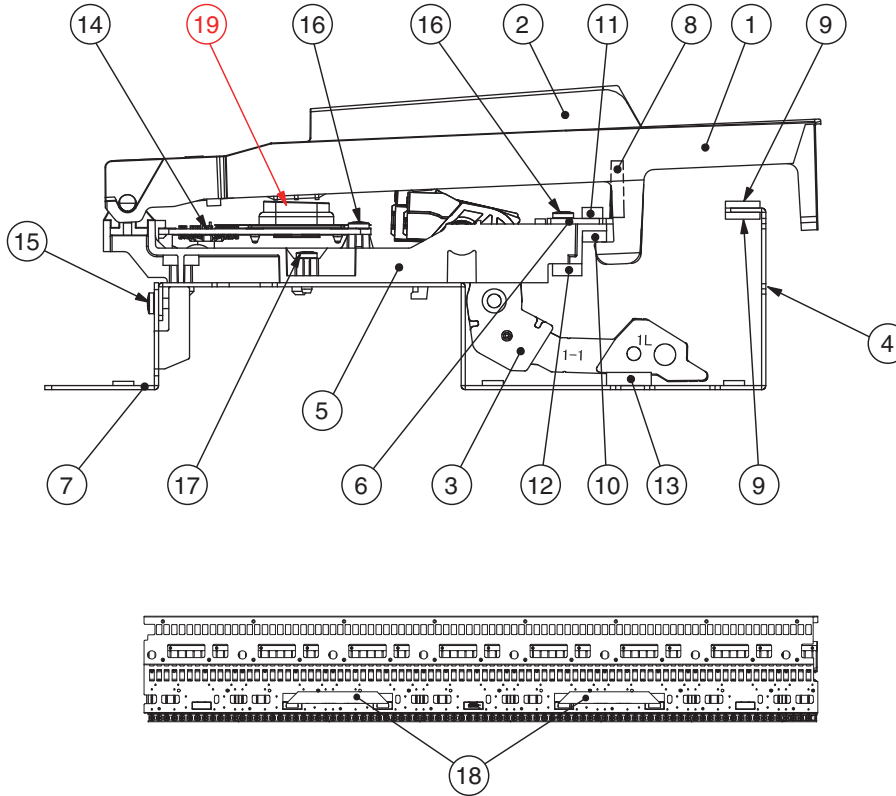
Revise Information

| | | |
|---------------|------|--------------------------------------|
| Dec. 2, 2013 | p. 6 | Changed grease. |
| May. 24, 2016 | p. 2 | Added parts. |
| Jul. 29, 2016 | p. 3 | Added the PX-7C keyboard parts list. |
| Aug. 10, 2016 | p. 3 | Changed a part code. |

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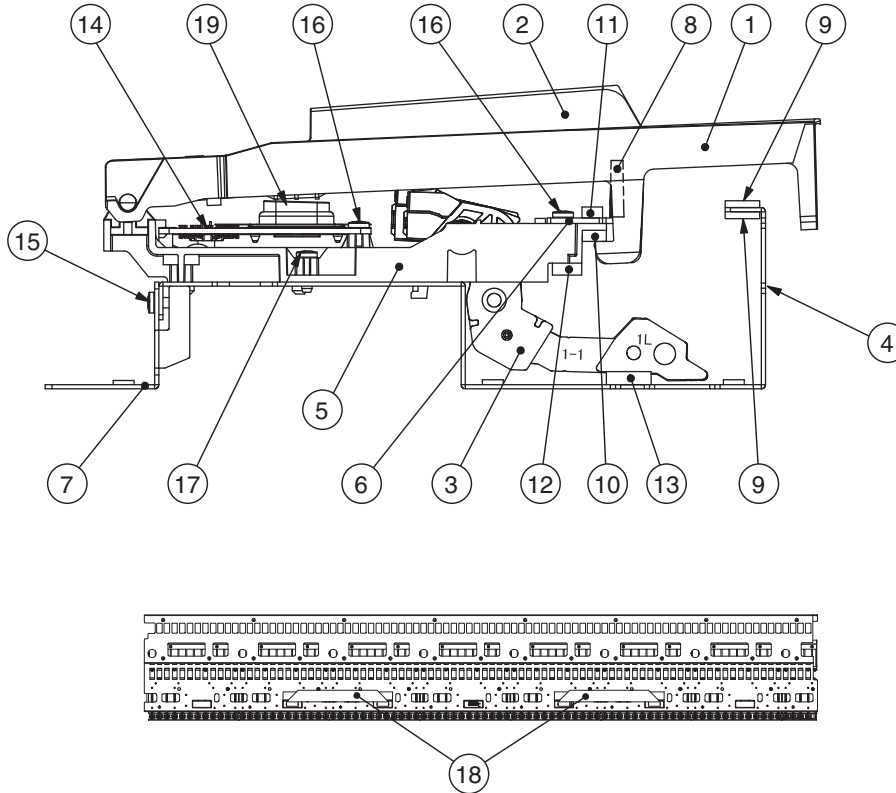
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Keyboard Parts List (PX-7B)



| No. | Part Code | Part Name | Description | Q'ty |
|-----|------------|--------------------|---------------------------|------|
| | 5100034009 | KEYBOARD ASSY | PX-7B | |
| 1 | 5100016416 | N-KEY C | PX-7 (C6200269R0) | 7 |
| | 5100016417 | N-KEY D | PX-7 (C6200270R0) | 7 |
| | 5100016418 | N-KEY E | PX-7 (C6200271R0) | 7 |
| | 5100016419 | N-KEY F | PX-7 (C6200272R0) | 7 |
| | 5100016420 | N-KEY G | PX-7 (C6200273R0) | 7 |
| | 5100016421 | N-KEY A | PX-7 (C6200274R0) | 7 |
| | 5100016422 | N-KEY B | PX-7 (C6200275R0) | 8 |
| | 5100016423 | N-KEY A DASH | PX-7 (C6200276R0) | 1 |
| | 5100016424 | N-KEY C DASH | PX-7 (C6200277R0) | 1 |
| | 5100016425 | S-KEY | PX-7 (C6200278R0) | 36 |
| 3 | 5100016251 | HAMMER-1 FOR N-KEY | PX-7 (61100160) | 13 |
| | 5100016252 | HAMMER-2 FOR N-KEY | PX-7 (61100170) | 13 |
| | 5100016253 | HAMMER-3 FOR N-KEY | PX-7 (61100180) | 13 |
| | 5100016254 | HAMMER-4 FOR N-KEY | PX-7 (61100190) | 13 |
| | 5100016255 | HAMMER-1 FOR S-KEY | PX-7 (611001A0) | 9 |
| | 5100016256 | HAMMER-2 FOR S-KEY | PX-7 (611001B0) | 9 |
| | 5100016257 | HAMMER-3 FOR S-KEY | PX-7 (611001C0) | 9 |
| | 5100016258 | HAMMER-4 FOR S-KEY | PX-7 (611001D0) | 9 |
| 4 | ***** | CHASSIS 88P | PX-7 | 1 |
| 5 | ***** | SUB CHASSIS 12P | PX-7 | 7 |
| | ***** | SUB CHASSIS 4P | PX-7 | 1 |
| 6 | ***** | GUIDE HOLDER | PX-7 | 1 |
| 7 | 5100016412 | KEYBOARD HOLDER | PX-7 (C6300217R0) | 6 |
| 8 | 5100016262 | GUIDE BUSHING | PX-7 | 88 |
| 9 | 5100019110 | KEY CUSHION A | PX-7 (C5000254R0) | 2 |
| | 5100019663 | KEY CUSHION B | PX-7 | 1 |
| 11 | 5100028252 | KEY CUSHION E | PX-7 | 1 |
| 12 | 5100019111 | HAMMER CUSHION A | PX-7 | 1 |
| 13 | 5100019664 | HAMMER CUSHION B | PX-7 | 1 |
| 14 | 5100037315 | PWB SET | PX-7B | 1 |
| 15 | 40011056 | SCREW 3X6 | BINDING TAPTITE B ZC | 12 |
| 16 | 40011312 | SCREW 3X8 | BINDING TAPTITE P FE BZC | 52 |
| 17 | 40012256 | SCREW 3X10 | BINDING TAPTITE B FE ZC | 60 |
| 18 | 5100033937 | FLAT CABLE | A-1.0-20X230-4/8-0.7X0.05 | 2 |
| 19 | 5100047674 | RUBBER SWITCH | 12P | 8 |

Keyboard Parts List (PX-7C)



| No. | Part Code | Part Name | Description | Q'ty |
|-----|-----------------------|--------------------|--------------------------------|------|
| | 5100053166 | KEYBOARD ASSY | PX-7C SV SERVICE ASSY | |
| | 5100054674 | | | |
| 1 | 5100046363 | N-KEY C | PX-7C | 7 |
| | 5100046364 | N-KEY D | PX-7C | 7 |
| | 5100046365 | N-KEY E | PX-7C | 7 |
| | 5100046366 | N-KEY F | PX-7C | 7 |
| | 5100046367 | N-KEY G | PX-7C | 7 |
| | 5100046361 | N-KEY A | PX-7C | 7 |
| | 5100046362 | N-KEY B | PX-7C | 8 |
| | 5100046368 | N-KEY A DASH | PX-7C | 1 |
| | 5100046369 | N-KEY C DASH | PX-7C | 1 |
| 2 | 5100046370 | S-KEY | PX-7C | 36 |
| 3 | 5100048710 | HAMMER-1 FOR N-KEY | PX-7C | 13 |
| | 5100048711 | HAMMER-2 FOR N-KEY | PX-7C | 13 |
| | 5100048712 | HAMMER-3 FOR N-KEY | PX-7C | 13 |
| | 5100048713 | HAMMER-4 FOR N-KEY | PX-7C | 13 |
| | 5100048714 | HAMMER-1 FOR S-KEY | PX-7C | 9 |
| | 5100048715 | HAMMER-2 FOR S-KEY | PX-7C | 9 |
| | 5100048716 | HAMMER-3 FOR S-KEY | PX-7C | 9 |
| | 5100048717 | HAMMER-4 FOR S-KEY | PX-7C | 9 |
| 4 | ***** | CHASSIS 88P | PX-7 | 1 |
| 5 | ***** | SUB CHASSIS 12P | PX-7 | 7 |
| | ***** | SUB CHASSIS 4P | PX-7 | 1 |
| 6 | ***** | GUIDE HOLDER | PX-7 | 1 |
| 7 | 5100046729 | KEYBOARD HOLDER | PX-7C | 6 |
| 8 | 5100046717 | GUIDE BUSHING | PX-7C | 88 |
| 9 | 5100048726 | KEY STOP CUSHION A | PX-7C | 2 |
| 10 | 5100019663 | KEY CUSHION B | PX-7 | 1 |
| 11 | 5100048727 | KEY STOP CUSHION B | PX-7 | 1 |
| 12 | 5100019111 | HAMMER CUSHION A | PX-7 | 1 |
| 13 | 5100019664 | HAMMER CUSHION B | PX-7 | 1 |
| 14 | 5100048968 | PWB SET | PX-7C | 1 |
| 15 | 40011056 | SCREW 3X6 | BINDING TAPTITE B ZC | 12 |
| 16 | 40011312 | SCREW 3X8 | BINDING TAPTITE P FE BZC | 52 |
| 17 | 40012256 | SCREW 3X10 | BINDING TAPTITE B FE ZC | 60 |
| 18 | 5100048969 | FLAT CABLE | SML2CD-20X222-BDX8(BL)-P1.0-S4 | 2 |
| 19 | 5100047674 | RUBBER SWITCH | 12P | 8 |

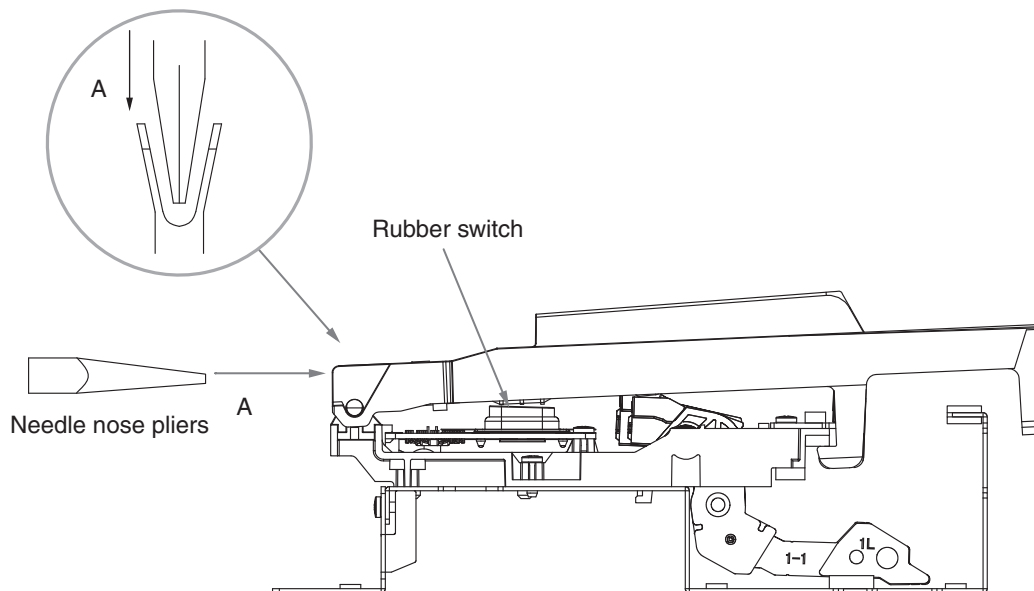
Keyboard Assembly Procedure

Removing the Key

Insert the tip of needle nose pliers into the U-groove on the pivot side and push in the direction of arrow A.

**Before removing black keys, first be sure to remove the adjacent white keys.*

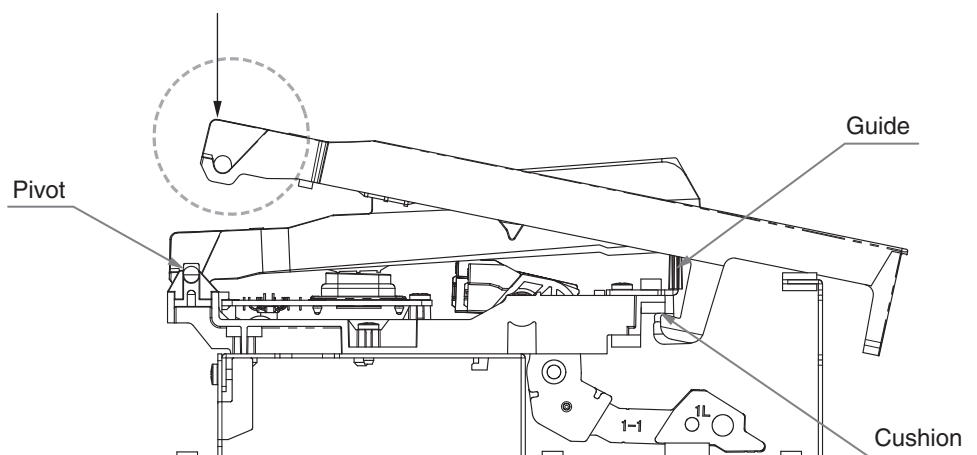
**Take care to ensure that the grease applied to the pivot area is not adhered to the rubber switch.*



Installing the Key

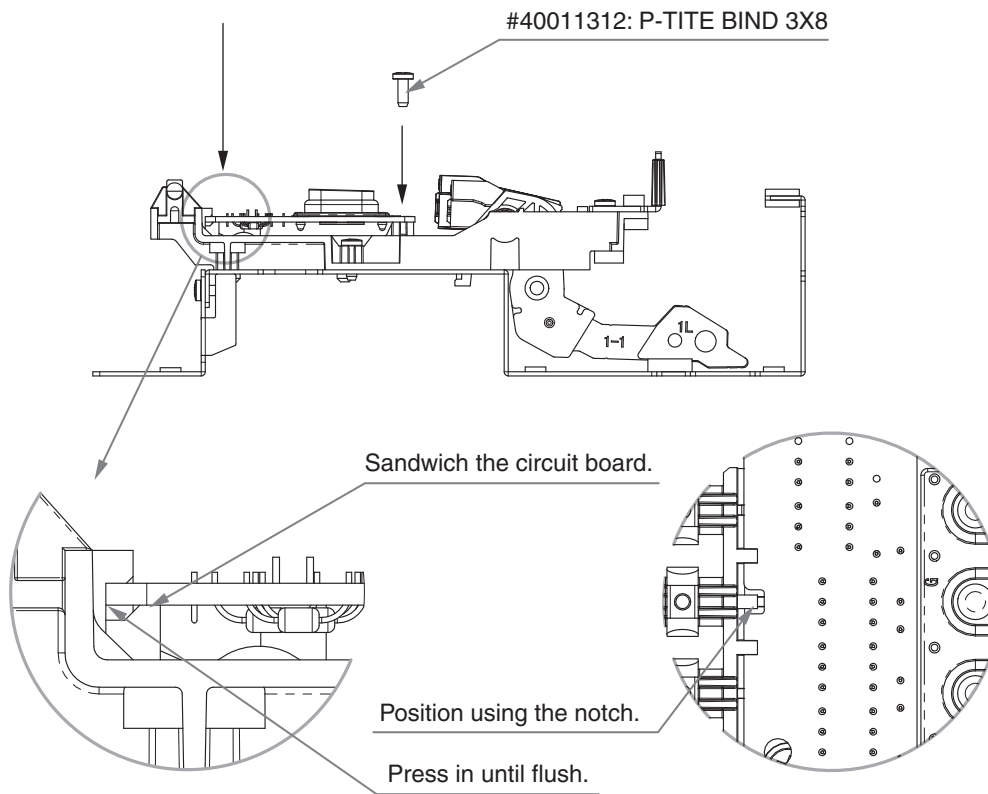
While hooking the foot of the key under the cushion, align the inner wall of the key with the guide, place it as shown in the figure, and press the area shown by the dotted line in the direction of the arrow until it engages with the pivot with an audible click.

**Before installing white keys, first be sure to install the adjacent black keys.*



Installing the Circuit Board

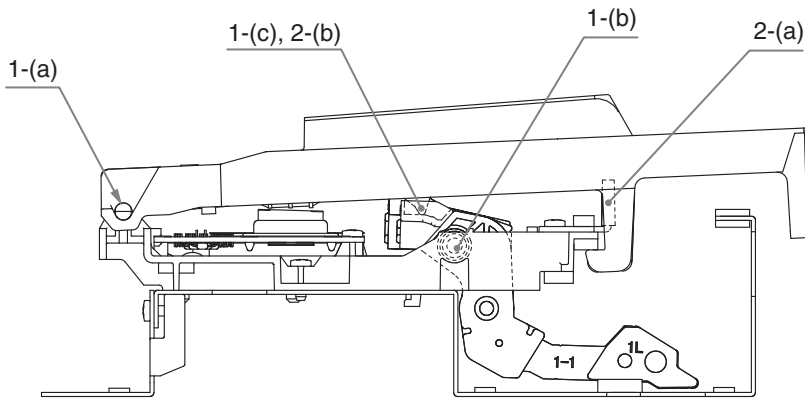
1. Peel off the backing paper of all the double-sided adhesive tape on the circuit board.
2. Align the notch of the circuit board with the tab on the sub-chassis and press the circuit board to the depth of the notch.
3. First, fasten with screws in the round holes.
Set the round holes in the circuit board on the center of the screw holes in the sub-chassis and secure in place.
4. Fasten screws in the slotted holes.



Application of Grease

Greasing Points

After the key or hammer has been replaced, the specified grease must be applied to the following points as shown in the figure.



- 1. MORICOAT G-1039.....pink (#17041858)**
 - (a) Key pivot
 - (b) Hammer pivot
 - (c) Contact between sharp key and hammer (actuator area)
- 2. FLOIL G-336A.....white (#17049543)**
 - (a) Key guide
 - (b) Contact between natural key and hammer (actuator area)

The Reasonable Amount of Grease



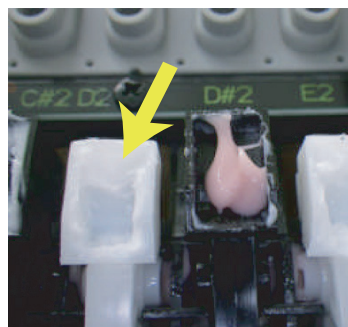
1-(a) Key pivot



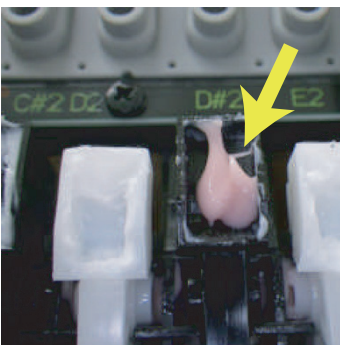
2-(a) Key guide



1-(b) Hammer pivot



2-(b) Contact between natural key and hammer

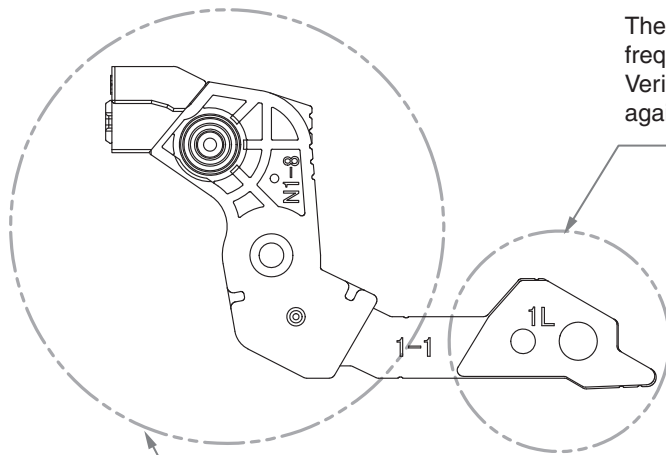


1-(c) Contact between sharp key and hammer

Regarding Hammer Placement


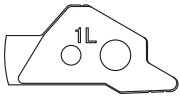
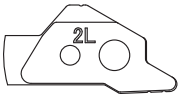
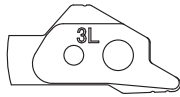
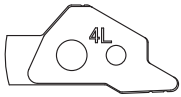


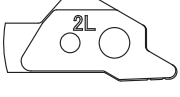
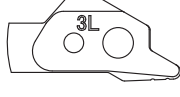

Hammers that have differently shaped metal and plastic portions are arranged as shown in the figure below. When replacing, be very careful not to position the hammers incorrectly.

**Installation at an incorrect location may impede key touch.*



The shape of the metal part differs according to the frequency range.
Verify by comparing the stamp on the part surface against the chart below.

The colors of the plastic portion differ.
White key = white
Black key = black
Refer to the photos in the chart below.

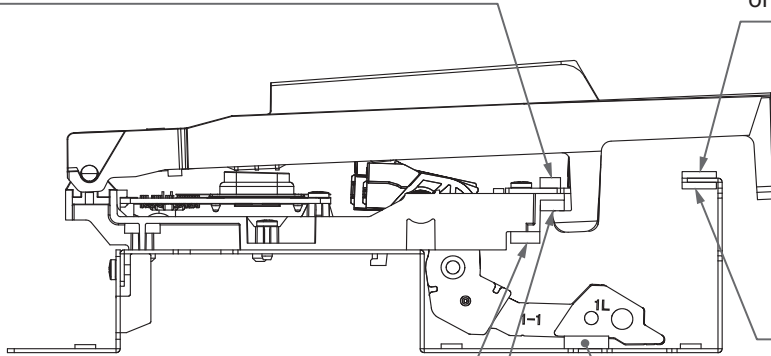
| | A0 ↔ F#2 | G2 ↔ E4 | F4 ↔ D6 | D#6 ↔ C8 |
|--|--|--|---|--|
|  Natural Key |  PX-7 N-KEY HAMMER-1 #5100016251 #5100048710 |  PX-7 N-KEY HAMMER-2 #5100016252 #5100048711 |  PX-7 N-KEY HAMMER-3 #5100016253 #5100048712 |  PX-7 N-KEY HAMMER-4 #5100016254 #5100048713 |
|  Sharp Key |  PX-7 S-KEY HAMMER-1 #5100016255 #5100048714 |  PX-7 S-KEY HAMMER-2 #5100016256 #5100048715 |  PX-7 S-KEY HAMMER-3 #5100016257 #5100048716 |  PX-7 S-KEY HAMMER-4 #5100016258 #5100048717 |

Affixing the Cushion

The cushions are of five types. Position each according to the instructions in the figure.

#5100028252 or #5100048727:
KEY CUSHION E (white)
Align with the edge of the Guide Holder.

#5100019110 or #5100048726:
KEY CUSHION A (white)
Position flush against the edge
of the metal-plate chassis.



#5100019110 or #5100048726:
KEY CUSHION A (white)
Position flush against the edge
of the metal-plate chassis.

#5100019111:
HAMMER CUSHION A (white/gray, 2 layers)
Position flush against the front edge
of the plastic sub-chassis.

#5100019664:
HAMMER CUSHION B (white/gray, 2 layers)
Align with the edge of the opening in the chassis.

#5100019663: KEY CUSHION B (white)
Position flush against the front edge
of the plastic sub-chassis.

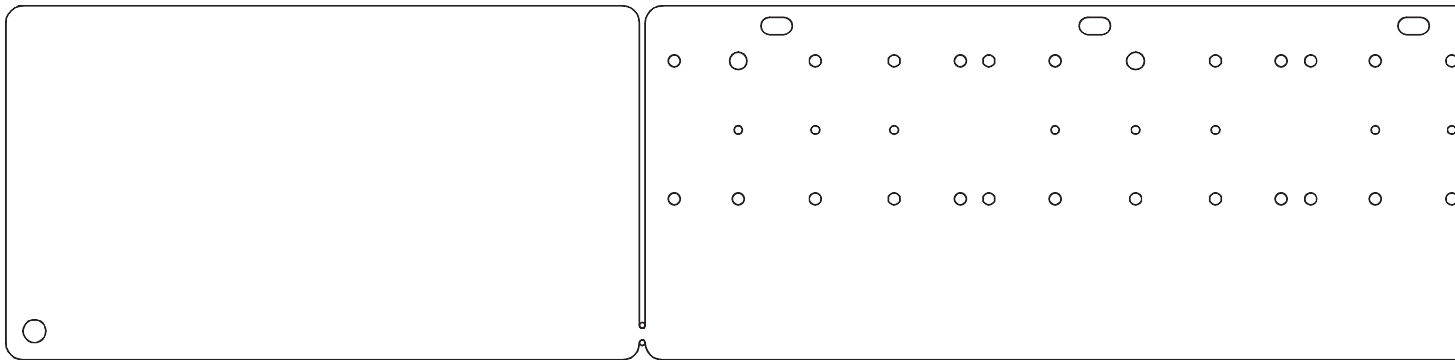
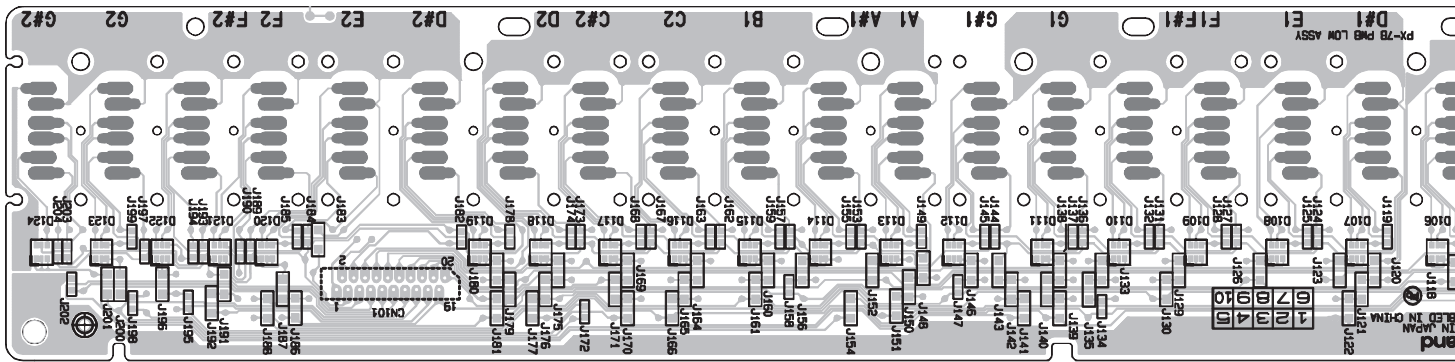
Affix with no meandering, protrusion, peeling, or the like.

If Hammer Cushion B (#5100019664) rubs against the surface, it may raise a nap. Affix pressed down from above so that no rubbing occurs.

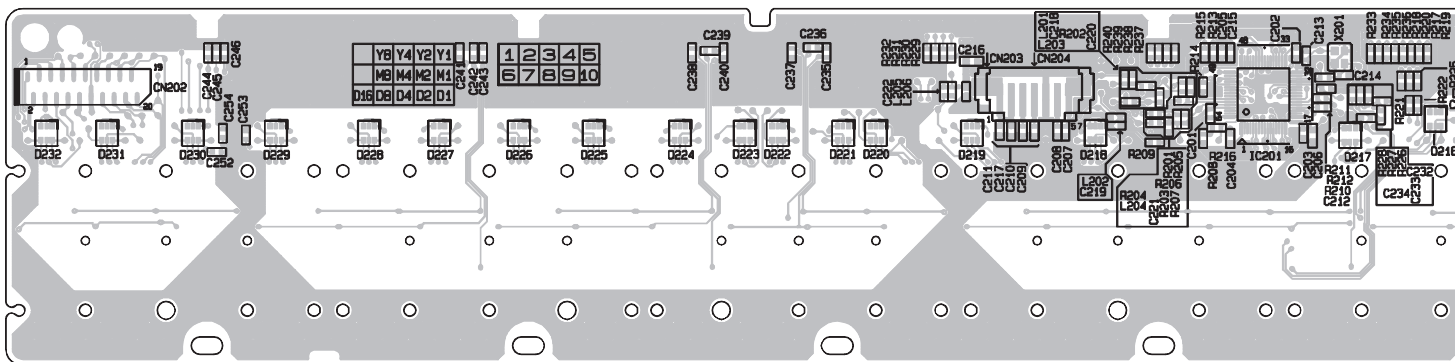
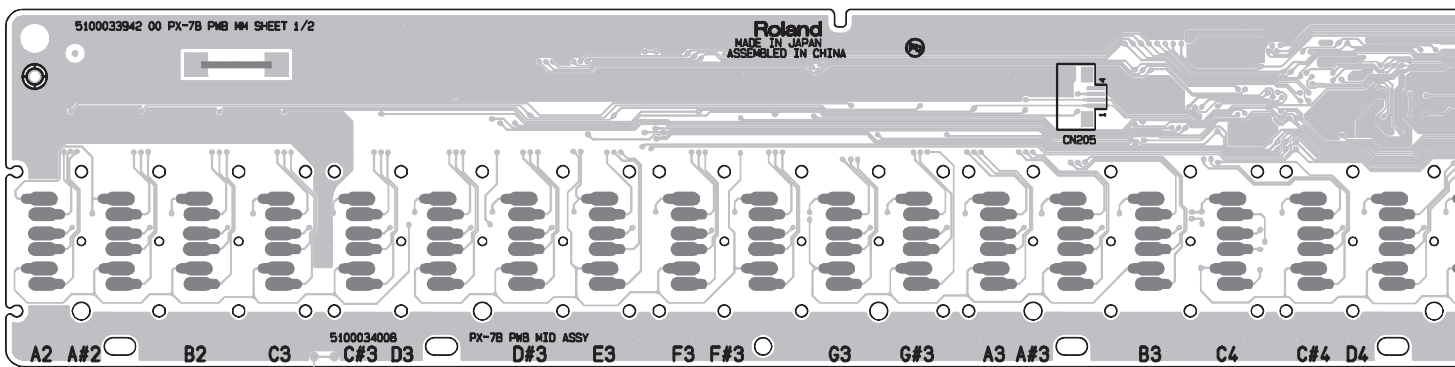
The cushions are all cut longer than the overall length of the chassis. After affixing, trim the protruding portions.

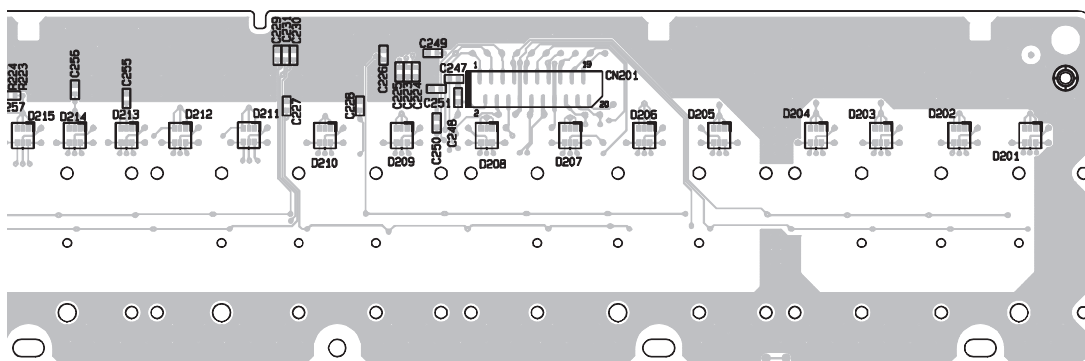
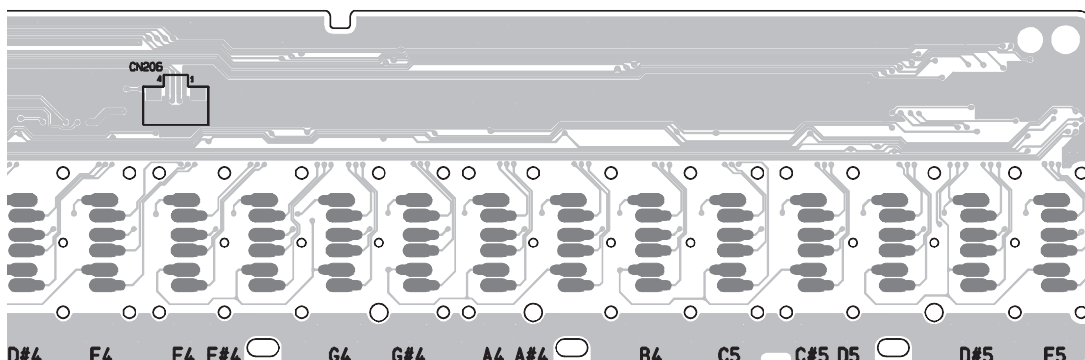
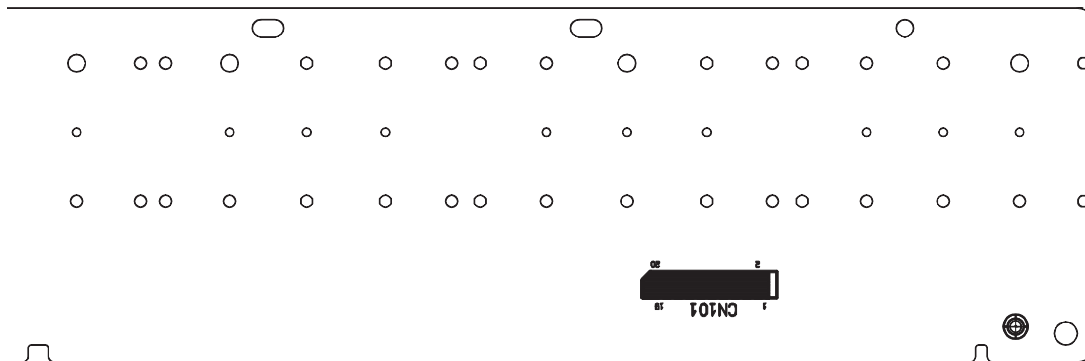
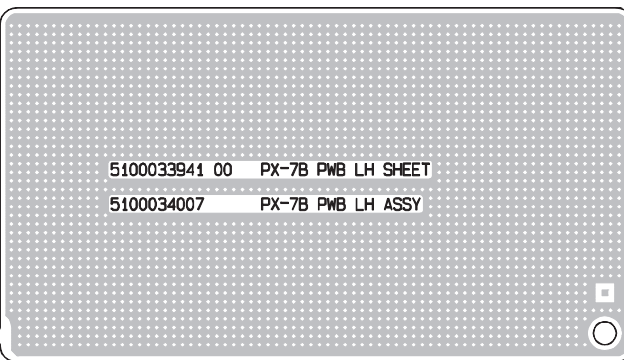
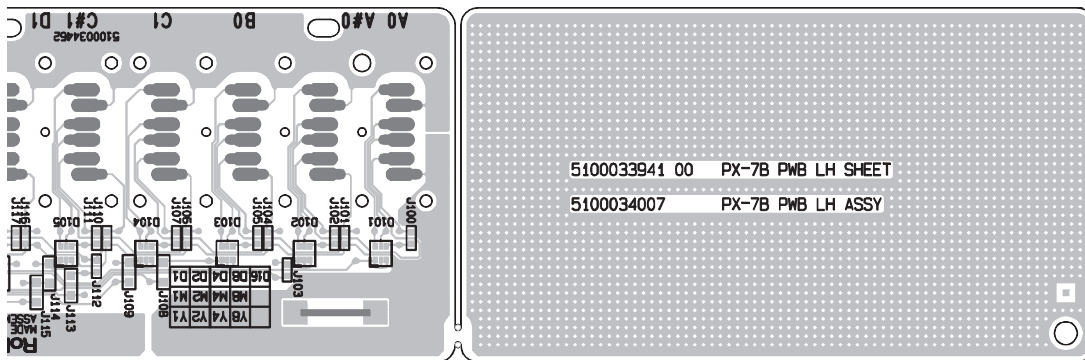
Circuit Board (Low, Mid)

Low

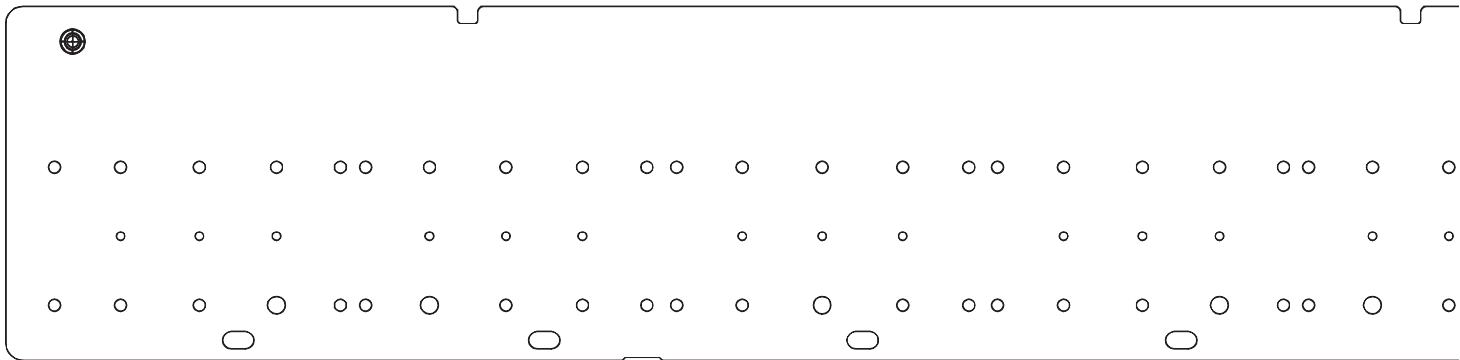
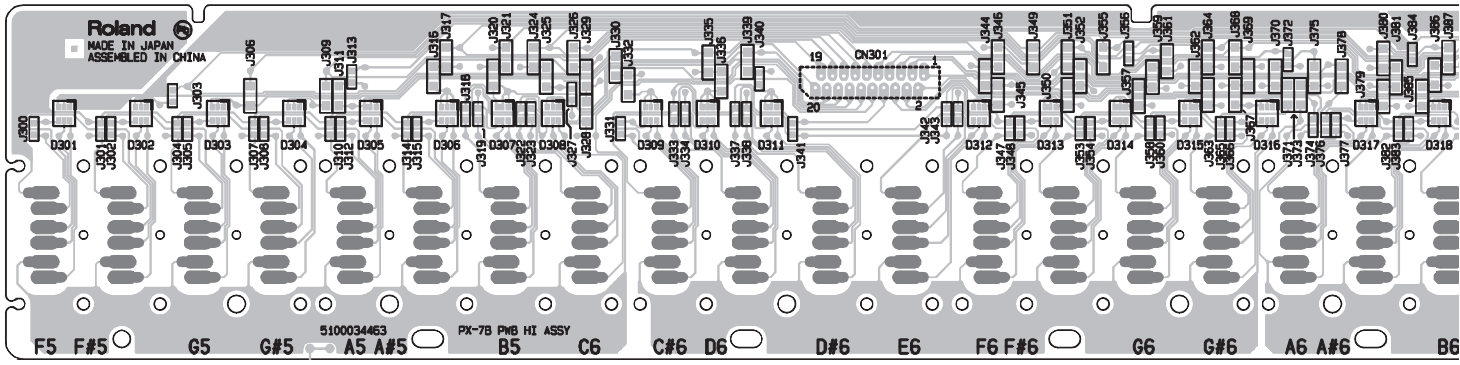


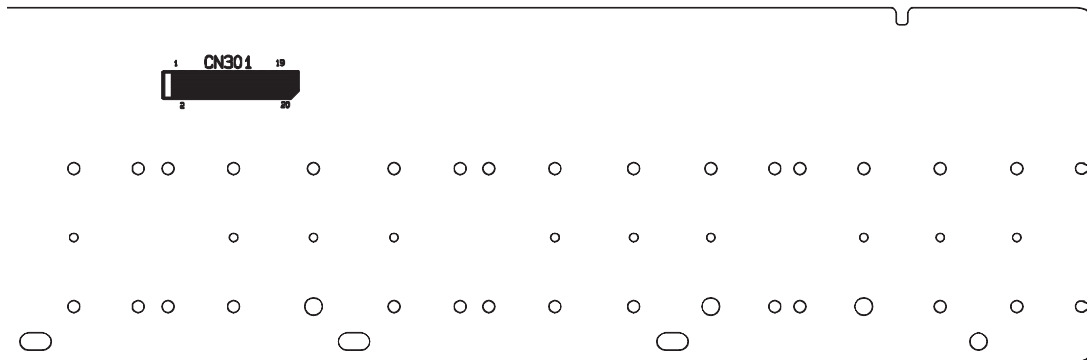
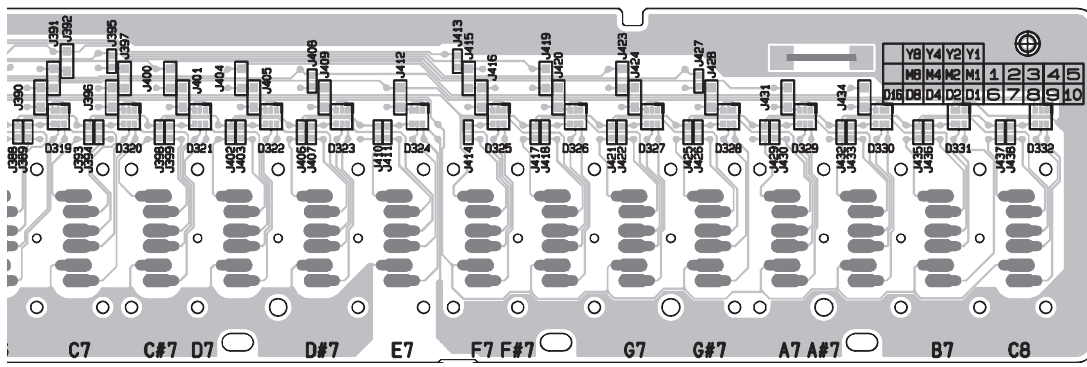
Mid





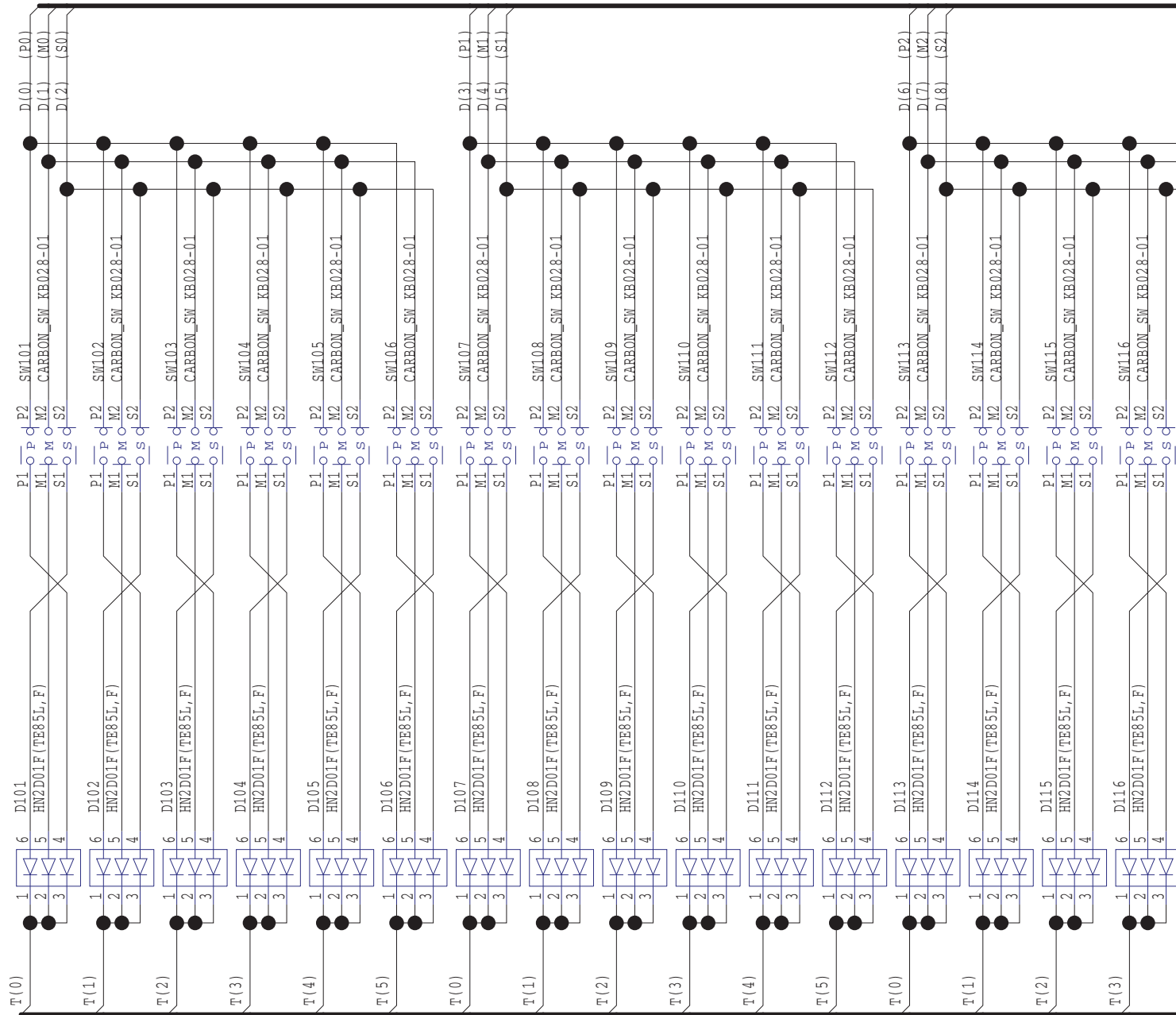
Circuit Board (High)





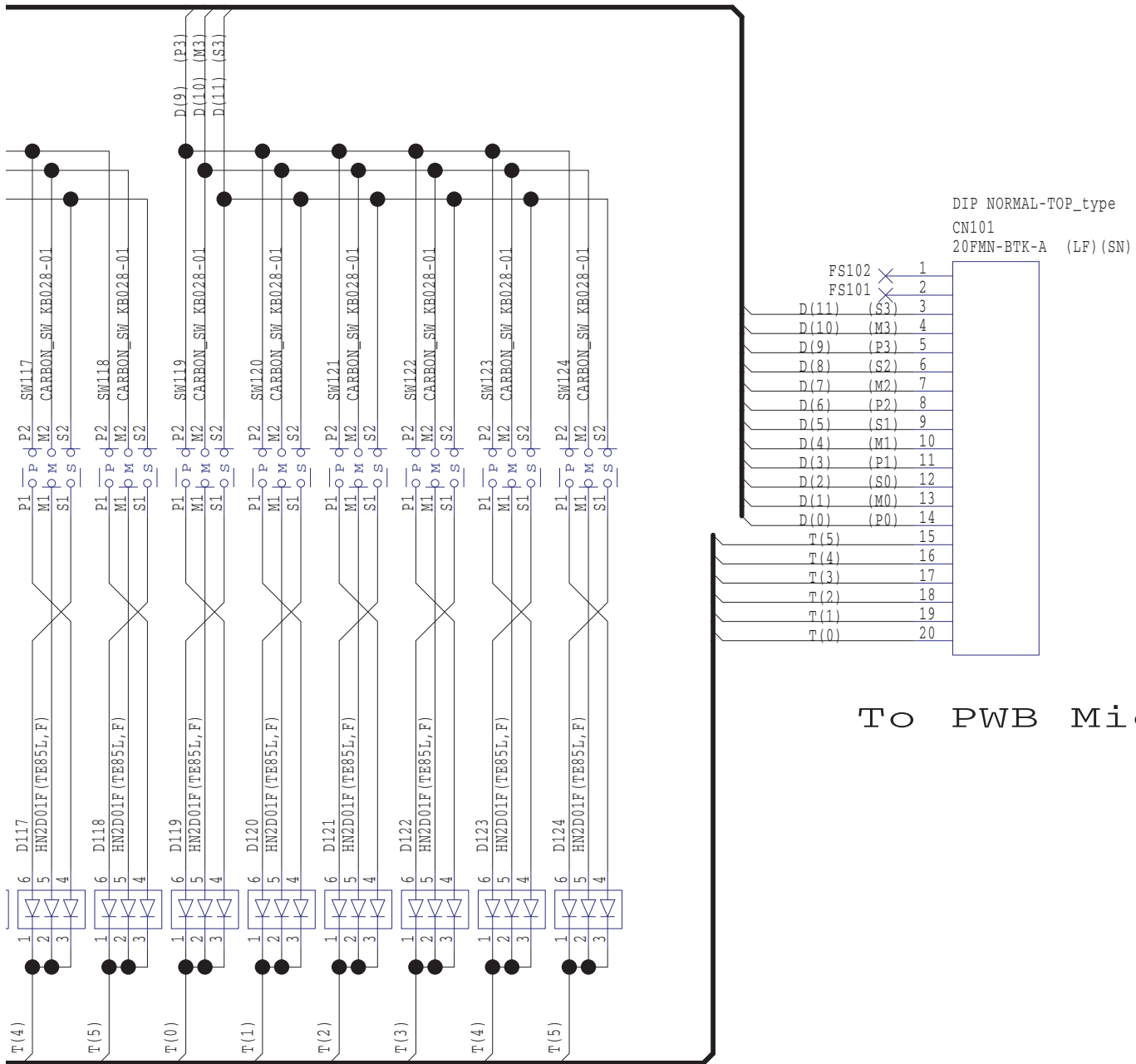
Circuit Diagram (Low)

D(0:11)



T(0:5)

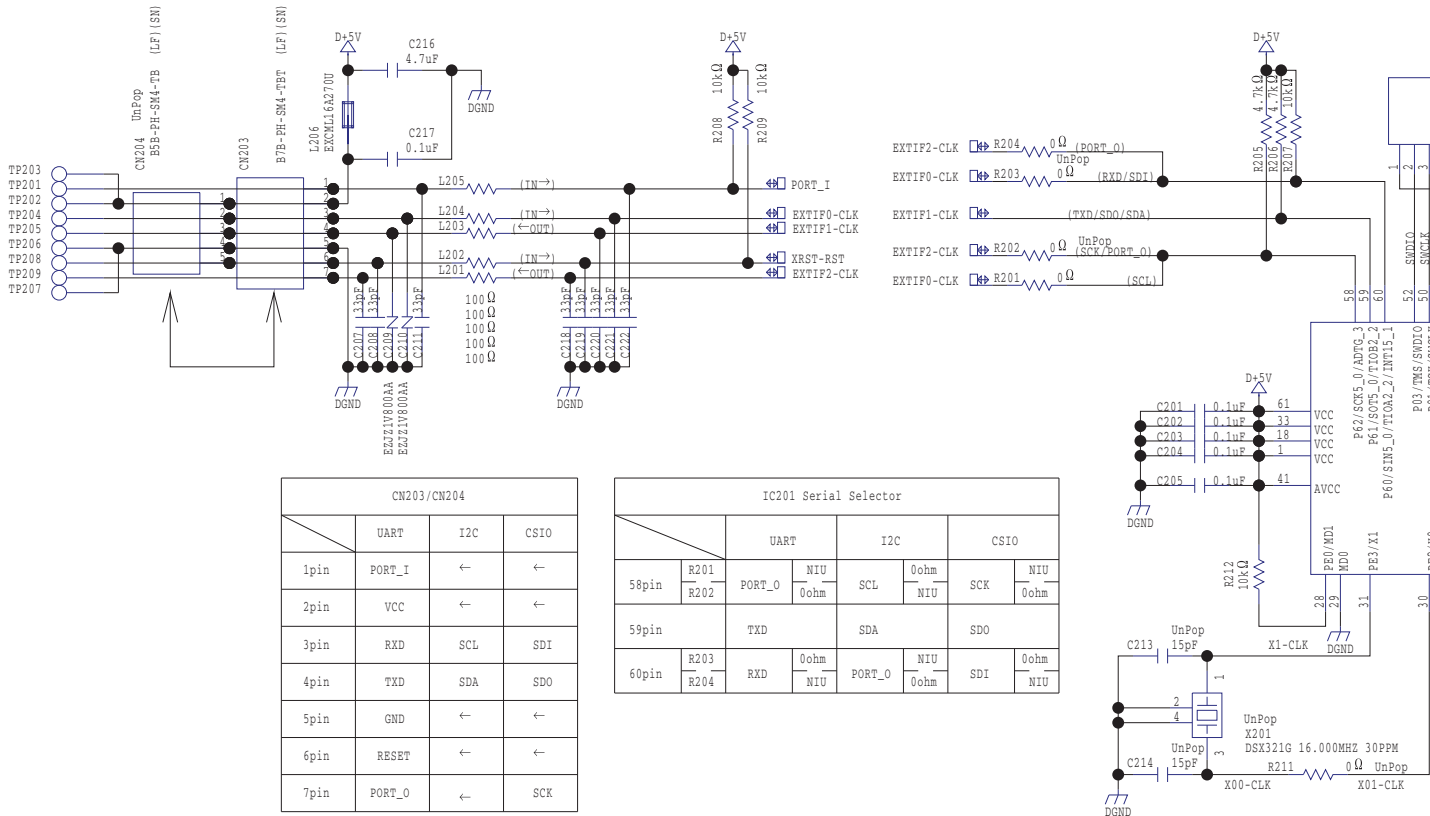
| | | | | | | | | | | | | | | | |
|----|------|----|----|------|----|------|----|----|------|----|------|----|------|----|----|
| A0 | A0 # | B0 | C1 | C1 # | D1 | D1 # | E1 | F1 | F1 # | G1 | G1 # | A1 | A1 # | B1 | C2 |
|----|------|----|----|------|----|------|----|----|------|----|------|----|------|----|----|



To PWB Mid

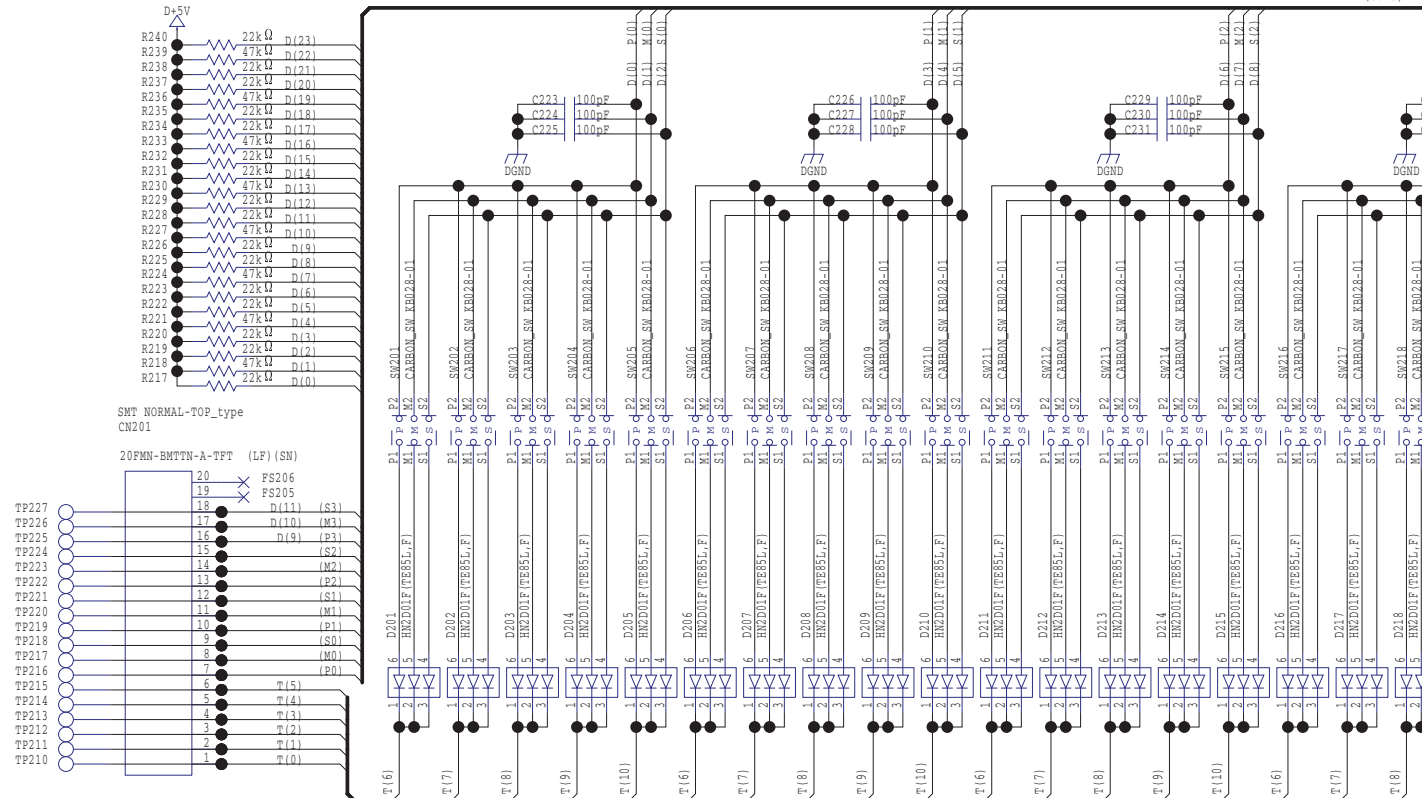
| | | | | | | | |
|------|----|------|----|----|------|----|------|
| C2 # | D2 | D2 # | E2 | F2 | F2 # | G2 | G2 # |
|------|----|------|----|----|------|----|------|

Circuit Diagram (Mid)



| | | CN203/CN204 | | |
|------|--------|-------------|-----|------|
| | | UART | I2C | CSIO |
| 1pin | PORT_I | ← | ← | |
| 2pin | VCC | ← | ← | |
| 3pin | RXD | SCL | SDI | |
| 4pin | TXD | SDA | SDO | |
| 5pin | GND | ← | ← | |
| 6pin | RESET | ← | ← | |
| 7pin | PORT_0 | ← | SCX | |

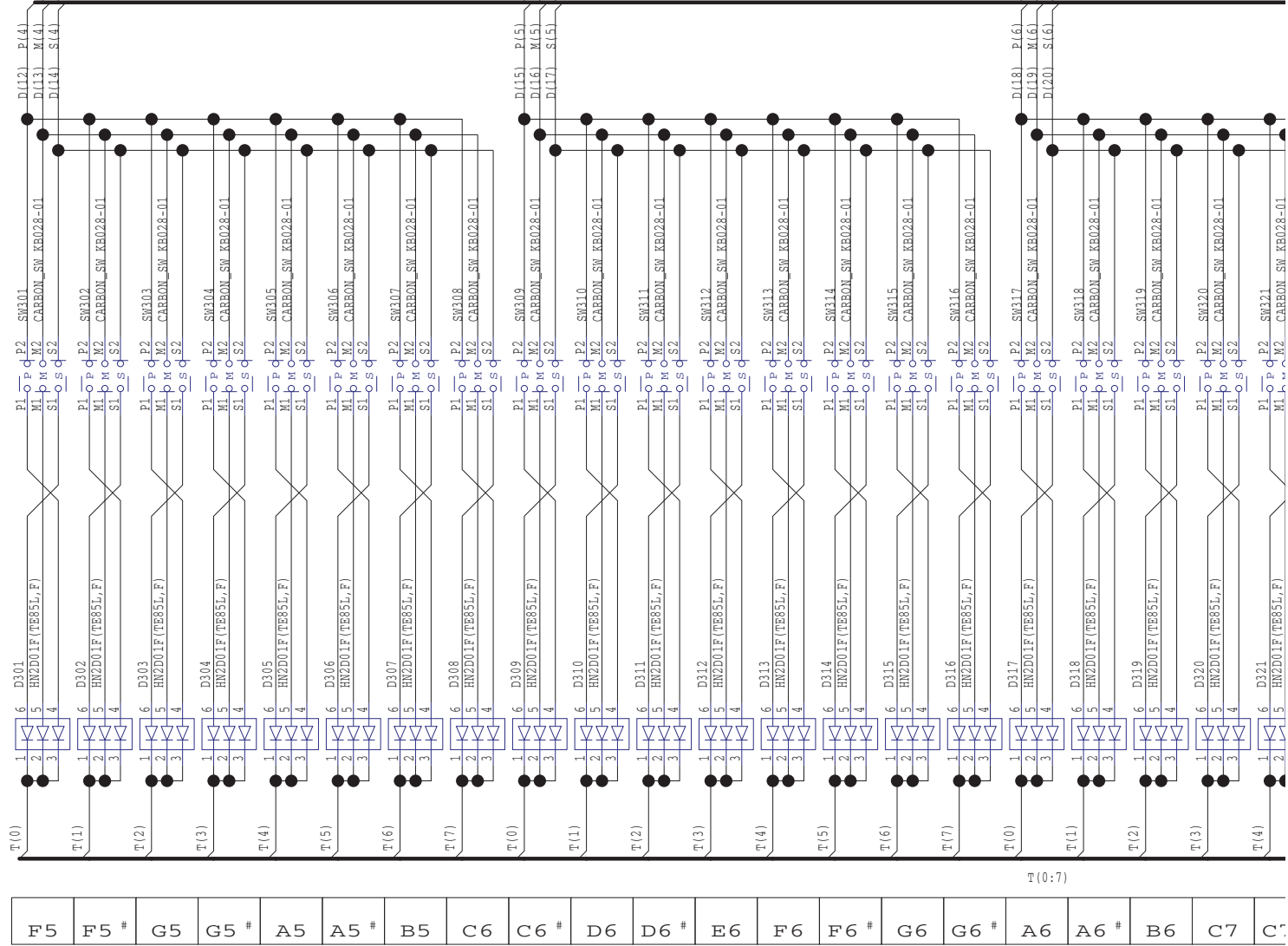
| | | IC201 Serial Selector | | | | | |
|-------|--------------|-----------------------|-------------|--------|-------------|------|-------------|
| | | UART | | I2C | | CSIO | |
| 58pin | R201 R202 | PORT_0 | NIU 0ohm | SCL | 0ohm NIU | SCK | NIU 0ohm |
| 59pin | R203 | TXD | 0ohm | SDA | NIU 0ohm | SDO | 0ohm |
| 60pin | R204 | RXD | NIU 0ohm | PORT_0 | 0ohm | SDI | NIU |



To PWB Low

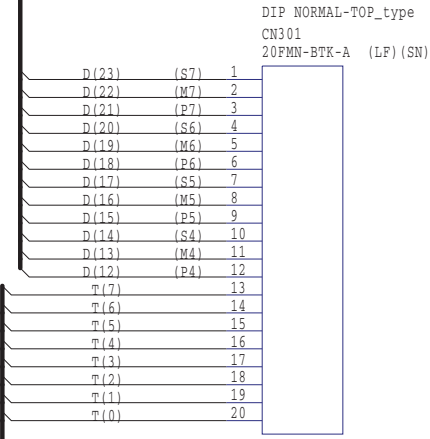
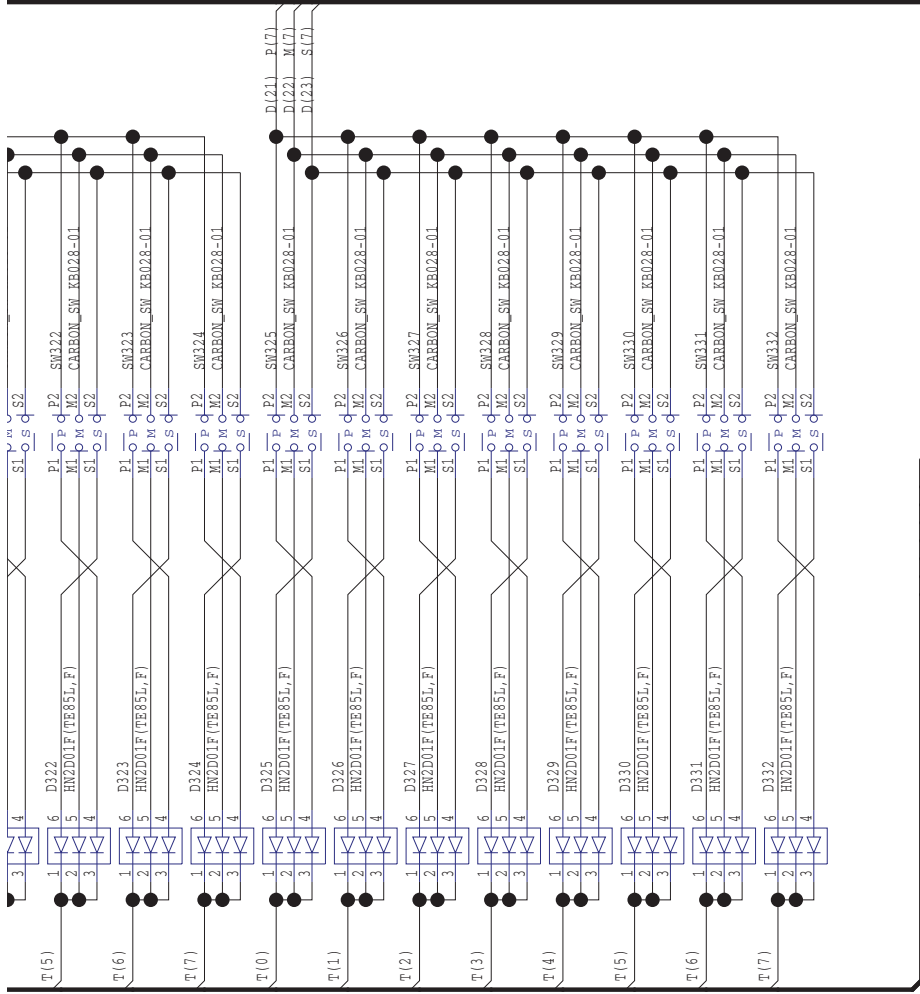
| | | | | | | | | | | | | | | | | | |
|----|------|----|----|------|----|------|----|----|------|----|------|----|------|----|----|------|----|
| A2 | A2 # | B2 | C3 | C3 # | D3 | D3 # | E3 | F3 | F3 # | G3 | G3 # | A3 | A3 # | B3 | C4 | C4 # | D4 |
|----|------|----|----|------|----|------|----|----|------|----|------|----|------|----|----|------|----|

Circuit Diagram (High)



| | | | | | | | | | | | | | | | | | | | | |
|----|------|----|------|----|------|----|----|------|----|------|----|----|------|----|------|----|------|----|----|------|
| F5 | F5 # | G5 | G5 # | A5 | A5 # | B5 | C6 | C6 # | D6 | D6 # | E6 | F6 | F6 # | G6 | G6 # | A6 | A6 # | B6 | C7 | C7 # |
|----|------|----|------|----|------|----|----|------|----|------|----|----|------|----|------|----|------|----|----|------|

:23)



To PWB Mid

| | | | | | | | | | | | |
|-----|----|------|----|----|------|----|------|----|------|----|----|
| 7 # | D7 | D7 # | E7 | F7 | F7 # | G7 | G7 # | A7 | A7 # | B7 | C8 |
|-----|----|------|----|----|------|----|------|----|------|----|----|