

PCA7759

MCU Signal Measurement Board for Renesas Emulator

User's Manual

Keep safety first in your circuit designs!

- Renesas Technology Corporation and Renesas Solutions Corporation put the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

Notes regarding these materials

- These materials are intended as a reference to assist our customers in the selection of the Renesas Technology product best suited to the customer's application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Renesas Technology Corporation, Renesas Solutions Corporation or a third party.
- Renesas Technology Corporation and Renesas Solutions Corporation assume no responsibility for any damage, or infringement of any third-party's rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.
- All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Renesas Technology Corporation and Renesas Solutions Corporation without notice due to product improvements or other reasons. It is therefore recommended that customers contact Renesas Technology Corporation, Renesas Solutions Corporation or an authorized Renesas Technology product distributor for the latest product information before purchasing a product listed herein. The information described here may contain technical inaccuracies or typographical errors. Renesas Technology Corporation and Renesas Solutions Corporation assume no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors. Please also pay attention to information published by Renesas Technology Corporation and Renesas Solutions Corporation by various means, including the Renesas home page (<http://www.renesas.com>).
- When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Renesas Technology Corporation and Renesas Solutions Corporation assume no responsibility for any damage, liability or other loss resulting from the information contained herein.
- Renesas Technology semiconductors are not designed or manufactured for use in a device or system that is used under circumstances in which human life is potentially at stake. Please contact Renesas Technology Corporation, Renesas Solutions Corporation or an authorized Renesas Technology product distributor when considering the use of a product contained herein for any specific purposes, such as apparatus or systems for transportation, vehicular, medical, aerospace, nuclear, or undersea repeater use.
- The prior written approval of Renesas Technology Corporation and Renesas Solutions Corporation is necessary to reprint or reproduce in whole or in part these materials.
- If these products or technologies are subject to the Japanese export control restrictions, they must be exported under a license from the Japanese government and cannot be imported into a country other than the approved destination. Any diversion or reexport contrary to the export control laws and regulations of Japan and/or the country of destination is prohibited.
- Please contact Renesas Technology Corporation or Renesas Solutions Corporation for further details on these materials or the products contained therein.

Precautions to be taken when using this product

- This product is a development supporting unit for use in your program development and evaluation stages. In mass-producing your program you have finished developing, be sure to make a judgment on your own risk that it can be put to practical use by performing integration test, evaluation, or some experiment else.
- In no event shall Renesas Solutions Corporation be liable for any consequence arising from the use of this product.
- Renesas Solutions Corporation strives to renovate or provide a workaround for product malfunction at some charge or without charge. However, this does not necessarily mean that Renesas Solutions Corporation guarantees the renovation or the provision under any circumstances.
- This product has been developed by assuming its use for program development and evaluation in laboratories. Therefore, it does not fall under the application of Electrical Appliance and Material Safety Law and protection against electromagnetic interference when used in Japan.

Renesas Tools Homepage <http://www.renesas.com/en/tools>



CAUTION

If the requirements shown in the "CAUTION" sentences are ignored, the equipment may cause personal injury or damage to the products.

Rev. 1.00

July 1, 2003

REJ10J0194-0100Z

Renesas Technology

www.renesas.com

1. Outline

The PCA7759 is a board for MCU signal measurement which is connected between an emulation probe or emulator and a package converter (M3T-FLX-144NSE etc.).

2. Package Components (see Figure 1)

- (1) PCA7759 measurement board
- (2) PCA7759 User's Manual (This manual)

3. Specifications

Table 1 Specifications

Insertion/removal iterations of connector	50 times guaranteed
---	---------------------

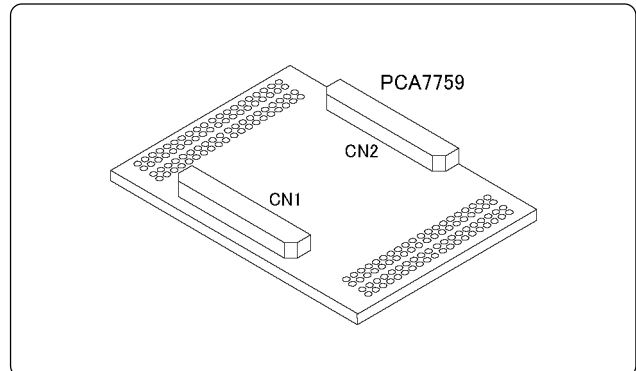


Figure 1 Package components of the PCA7759

4. External Dimensions

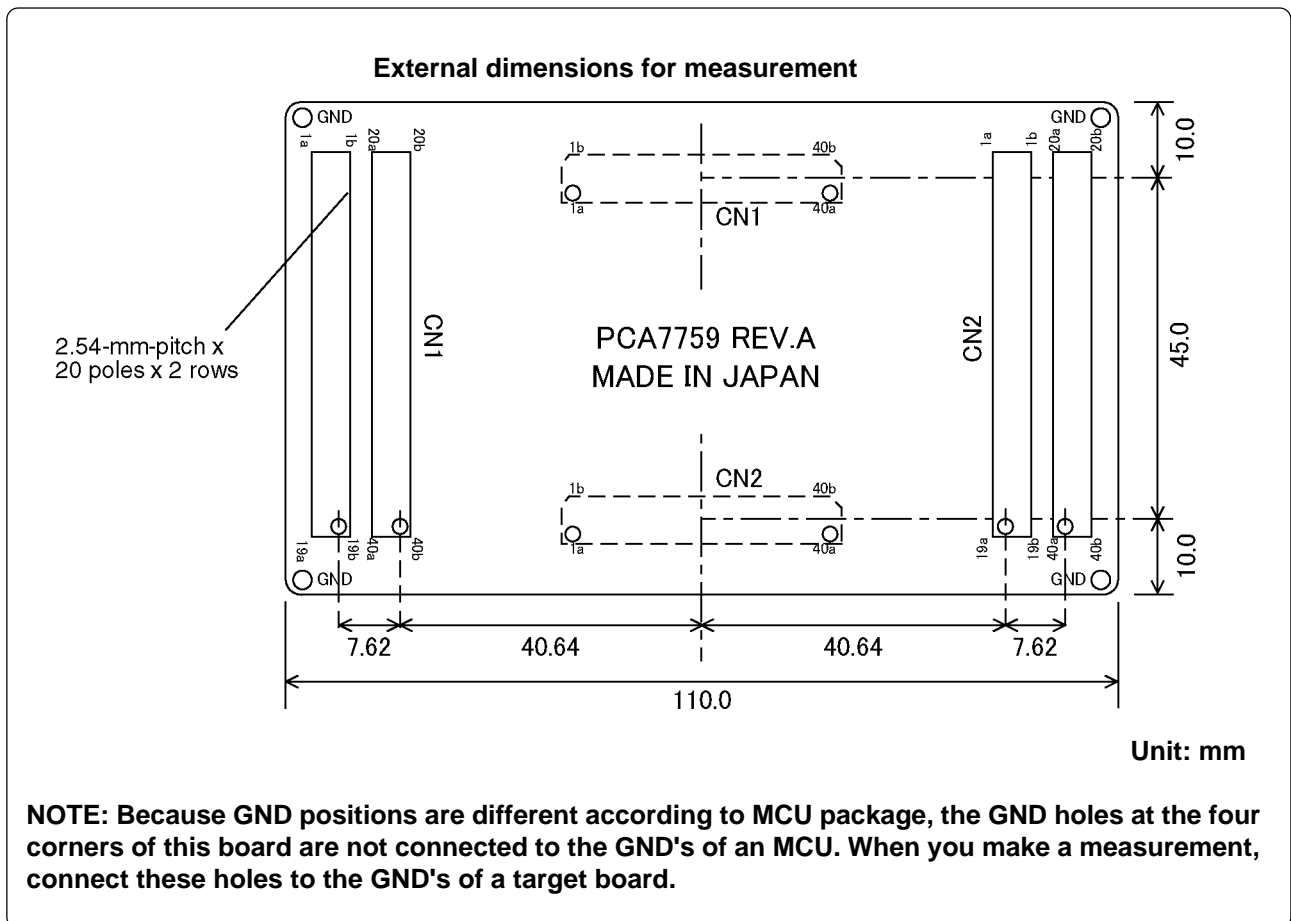


Figure 2 External dimensions of the PCA7759

5. Usage (see Figure 2)

The PCA7759 is connected between an emulation probe or emulator and package converter. According to the converter you use, the pin numbers of an MCU allocated to CN1 and CN2. For details on pin correspondence, see 7. Correspondence of Connectors CN1 and CN2 (pages 4 to 8).

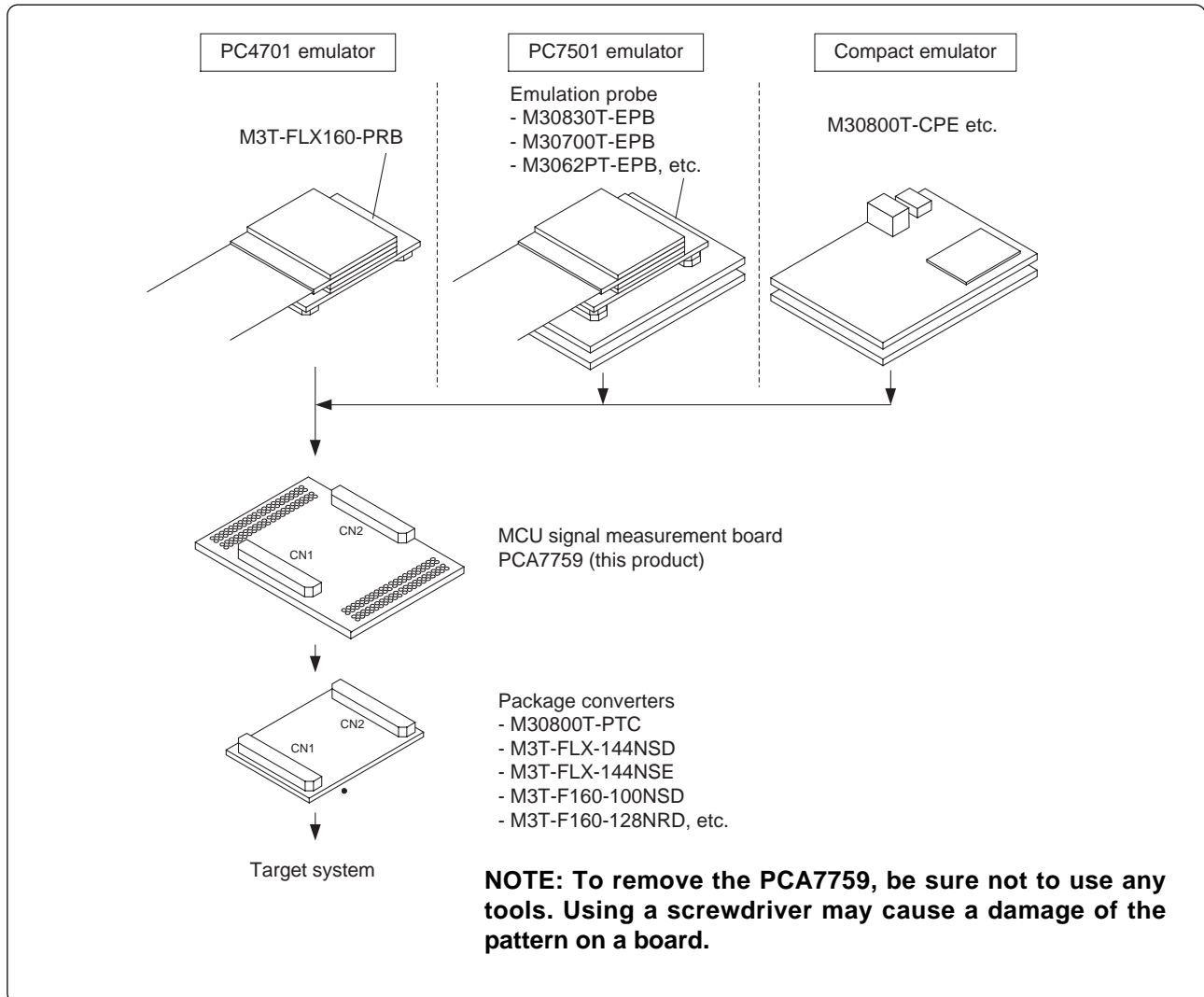


Figure 3 Usage of the PCA7759

6. Precautions

⚠ CAUTION

Cautions to Be Taken for This Product:



- When you remove the PCA7759, be sure to remove it carefully. Otherwise the connector may be damaged.
- Do not use a screw driver or the like to remove the PCA7759. Otherwise the pattern on a board may be damaged.
- We cannot accept any request for repair.
- If there is any question or doubt about this product or this instruction manual, contact the following.
Renesas Tools Homepage <http://www.renesas.com/en/tools>

7. Correspondence of Connectors CN1 and CN2

Here follows pin correspondence of each package converter.

If your package converter is not listed here, refer to the correspondence table at the end of the instruction manual of your package converter. For the latest information including manuals, visit the Renesas Tools Homepage

<http://www.renesas.com/en/tools>

Table 2 Connector correspondence (Using M3T-FLX-144NSE and M3T-FLX-144NSD)

CN1 No	IC No.	CN1 No.	IC No.	CN2 No.	IC No.	CN2 No.	IC No.
CN1- 1a	GND	CN1- 1b	18	CN2- 1a	GND	CN2- 1b	19
CN1- 2a	17	CN1- 2b	16	CN2- 2a	20	CN2- 2b	21
CN1- 3a	15	CN1- 3b	14	CN2- 3a	22	CN2- 3b	23
CN1- 4a	13	CN1- 4b	12	CN2- 4a	24	CN2- 4b	25
CN1- 5a	11	CN1- 5b	10	CN2- 5a	26	CN2- 5b	27
CN1- 6a	9	CN1- 6b	8	CN2- 6a	28	CN2- 6b	29
CN1- 7a	7	CN1- 7b	6	CN2- 7a	30	CN2- 7b	31
CN1- 8a	5	CN1- 8b	4	CN2- 8a	32	CN2- 8b	33
CN1- 9a	3	CN1- 9b	2	CN2- 9a	34	CN2- 9b	35
CN1- 10a	1	CN1- 10b	GND	CN2- 10a	36	CN2- 10b	GND
CN1- 11a	GND	CN1- 11b	144	CN2- 11a	GND	CN2- 11b	37
CN1- 12a	143	CN1- 12b	142	CN2- 12a	38	CN2- 12b	39
CN1- 13a	141	CN1- 13b	140	CN2- 13a	40	CN2- 13b	41
CN1- 14a	139	CN1- 14b	138	CN2- 14a	42	CN2- 14b	43
CN1- 15a	137	CN1- 15b	136	CN2- 15a	44	CN2- 15b	45
CN1- 16a	135	CN1- 16b	134	CN2- 16a	46	CN2- 16b	47
CN1- 17a	133	CN1- 17b	132	CN2- 17a	48	CN2- 17b	49
CN1- 18a	131	CN1- 18b	130	CN2- 18a	50	CN2- 18b	51
CN1- 19a	129	CN1- 19b	128	CN2- 19a	52	CN2- 19b	53
CN1- 20a	127	CN1- 20b	GND	CN2- 20a	54	CN2- 20b	GND
CN1- 21a	GND	CN1- 21b	126	CN2- 21a	GND	CN2- 21b	55
CN1- 22a	125	CN1- 22b	124	CN2- 22a	56	CN2- 22b	57
CN1- 23a	123	CN1- 23b	122	CN2- 23a	58	CN2- 23b	59
CN1- 24a	121	CN1- 24b	120	CN2- 24a	60	CN2- 24b	61
CN1- 25a	119	CN1- 25b	118	CN2- 25a	62	CN2- 25b	63
CN1- 26a	117	CN1- 26b	116	CN2- 26a	64	CN2- 26b	65
CN1- 27a	115	CN1- 27b	114	CN2- 27a	66	CN2- 27b	67
CN1- 28a	113	CN1- 28b	112	CN2- 28a	68	CN2- 28b	69
CN1- 29a	111	CN1- 29b	110	CN2- 29a	70	CN2- 29b	71
CN1- 30a	109	CN1- 30b	GND	CN2- 30a	72	CN2- 30b	GND
CN1- 31a	GND	CN1- 31b	108	CN2- 31a	GND	CN2- 31b	73
CN1- 32a	107	CN1- 32b	106	CN2- 32a	74	CN2- 32b	75
CN1- 33a	105	CN1- 33b	104	CN2- 33a	76	CN2- 33b	77
CN1- 34a	103	CN1- 34b	102	CN2- 34a	78	CN2- 34b	79
CN1- 35a	101	CN1- 35b	100	CN2- 35a	80	CN2- 35b	81
CN1- 36a	99	CN1- 36b	98	CN2- 36a	82	CN2- 36b	83
CN1- 37a	97	CN1- 37b	96	CN2- 37a	84	CN2- 37b	85
CN1- 38a	95	CN1- 38b	94	CN2- 38a	86	CN2- 38b	87
CN1- 39a	93	CN1- 39b	92	CN2- 39a	88	CN2- 39b	89
CN1- 40a	91	CN1- 40b	GND	CN2- 40a	90	CN2- 40b	GND

(-: No connection)

Table 3 Connector correspondence (Using M3T-F160-128NRD)

CN1 No	IC No.	CN1 No.	IC No.	CN2 No.	IC No.	CN2 No.	IC No.
CN1- 1a	-	CN1- 1b	16	CN2- 1a	-	CN2- 1b	17
CN1- 2a	15	CN1- 2b	14	CN2- 2a	18	CN2- 2b	19
CN1- 3a	13	CN1- 3b	12	CN2- 3a	20	CN2- 3b	21
CN1- 4a	11	CN1- 4b	-	CN2- 4a	22	CN2- 4b	23
CN1- 5a	-	CN1- 5b	-	CN2- 5a	24	CN2- 5b	25
CN1- 6a	-	CN1- 6b	-	CN2- 6a	26	CN2- 6b	27
CN1- 7a	10	CN1- 7b	9	CN2- 7a	28	CN2- 7b	29
CN1- 8a	8	CN1- 8b	7	CN2- 8a	30	CN2- 8b	31
CN1- 9a	6	CN1- 9b	5	CN2- 9a	32	CN2- 9b	33
CN1- 10a	4	CN1- 10b	-	CN2- 10a	34	CN2- 10b	-
CN1- 11a	-	CN1- 11b	3	CN2- 11a	-	CN2- 11b	35
CN1- 12a	2	CN1- 12b	1	CN2- 12a	36	CN2- 12b	37
CN1- 13a	128	CN1- 13b	127	CN2- 13a	38	CN2- 13b	39
CN1- 14a	126	CN1- 14b	125	CN2- 14a	40	CN2- 14b	41
CN1- 15a	124	CN1- 15b	123	CN2- 15a	42	CN2- 15b	43
CN1- 16a	122	CN1- 16b	121	CN2- 16a	44	CN2- 16b	45
CN1- 17a	120	CN1- 17b	-	CN2- 17a	46	CN2- 17b	47
CN1- 18a	119	CN1- 18b	-	CN2- 18a	48	CN2- 18b	49
CN1- 19a	118	CN1- 19b	117	CN2- 19a	50	CN2- 19b	51
CN1- 20a	116	CN1- 20b	-	CN2- 20a	52	CN2- 20b	-
CN1- 21a	-	CN1- 21b	115	CN2- 21a	-	CN2- 21b	53
CN1- 22a	114	CN1- 22b	113	CN2- 22a	54	CN2- 22b	-
CN1- 23a	112	CN1- 23b	111	CN2- 23a	55	CN2- 23b	-
CN1- 24a	110	CN1- 24b	109	CN2- 24a	56	CN2- 24b	57
CN1- 25a	108	CN1- 25b	-	CN2- 25a	58	CN2- 25b	59
CN1- 26a	-	CN1- 26b	-	CN2- 26a	60	CN2- 26b	61
CN1- 27a	-	CN1- 27b	-	CN2- 27a	62	CN2- 27b	63
CN1- 28a	107	CN1- 28b	106	CN2- 28a	64	CN2- 28b	65
CN1- 29a	105	CN1- 29b	104	CN2- 29a	66	CN2- 29b	67
CN1- 30a	103	CN1- 30b	-	CN2- 30a	68	CN2- 30b	-
CN1- 31a	-	CN1- 31b	102	CN2- 31a	-	CN2- 31b	69
CN1- 32a	101	CN1- 32b	100	CN2- 32a	-	CN2- 32b	70
CN1- 33a	99	CN1- 33b	98	CN2- 33a	-	CN2- 33b	71
CN1- 34a	97	CN1- 34b	96	CN2- 34a	72	CN2- 34b	73
CN1- 35a	95	CN1- 35b	94	CN2- 35a	74	CN2- 35b	75
CN1- 36a	93	CN1- 36b	92	CN2- 36a	76	CN2- 36b	77
CN1- 37a	91	CN1- 37b	90	CN2- 37a	78	CN2- 37b	79
CN1- 38a	89	CN1- 38b	88	CN2- 38a	80	CN2- 38b	81
CN1- 39a	87	CN1- 39b	86	CN2- 39a	82	CN2- 39b	83
CN1- 40a	85	CN1- 40b	-	CN2- 40a	84	CN2- 40b	-

(-: No connection)

Table 4 Connector correspondence (Using M3T-FLX-120NSE)

CN1 No	IC No.	CN1 No.	IC No.	CN2 No.	IC No.	CN2 No.	IC No.
CN1- 1a	-	CN1- 1b	15	CN2- 1a	-	CN2- 1b	16
CN1- 2a	14	CN1- 2b	13	CN2- 2a	17	CN2- 2b	18
CN1- 3a	12	CN1- 3b	11	CN2- 3a	19	CN2- 3b	20
CN1- 4a	10	CN1- 4b	-	CN2- 4a	21	CN2- 4b	22
CN1- 5a	9	CN1- 5b	-	CN2- 5a	23	CN2- 5b	24
CN1- 6a	8	CN1- 6b	-	CN2- 6a	25	CN2- 6b	26
CN1- 7a	7	CN1- 7b	6	CN2- 7a	27	CN2- 7b	28
CN1- 8a	5	CN1- 8b	4	CN2- 8a	-	CN2- 8b	-
CN1- 9a	3	CN1- 9b	2	CN2- 9a	-	CN2- 9b	-
CN1- 10a	1	CN1- 10b	-	CN2- 10a	29	CN2- 10b	-
CN1- 11a	-	CN1- 11b	-	CN2- 11a	-	CN2- 11b	30
CN1- 12a	120	CN1- 12b	119	CN2- 12a	31	CN2- 12b	32
CN1- 13a	118	CN1- 13b	117	CN2- 13a	33	CN2- 13b	34
CN1- 14a	116	CN1- 14b	-	CN2- 14a	-	CN2- 14b	-
CN1- 15a	-	CN1- 15b	115	CN2- 15a	35	CN2- 15b	36
CN1- 16a	114	CN1- 16b	113	CN2- 16a	37	CN2- 16b	38
CN1- 17a	112	CN1- 17b	111	CN2- 17a	39	CN2- 17b	40
CN1- 18a	110	CN1- 18b	109	CN2- 18a	-	CN2- 18b	-
CN1- 19a	108	CN1- 19b	107	CN2- 19a	-	CN2- 19b	41
CN1- 20a	-	CN1- 20b	-	CN2- 20a	42	CN2- 20b	-
CN1- 21a	-	CN1- 21b	-	CN2- 21a	-	CN2- 21b	-
CN1- 22a	106	CN1- 22b	105	CN2- 22a	43	CN2- 22b	44
CN1- 23a	104	CN1- 23b	103	CN2- 23a	45	CN2- 23b	46
CN1- 24a	102	CN1- 24b	101	CN2- 24a	47	CN2- 24b	48
CN1- 25a	100	CN1- 25b	99	CN2- 25a	49	CN2- 25b	50
CN1- 26a	98	CN1- 26b	97	CN2- 26a	51	CN2- 26b	52
CN1- 27a	96	CN1- 27b	95	CN2- 27a	53	CN2- 27b	54
CN1- 28a	94	CN1- 28b	93	CN2- 28a	55	CN2- 28b	56
CN1- 29a	92	CN1- 29b	91	CN2- 29a	57	CN2- 29b	58
CN1- 30a	90	CN1- 30b	-	CN2- 30a	59	CN2- 30b	-
CN1- 31a	-	CN1- 31b	89	CN2- 31a	-	CN2- 31b	60
CN1- 32a	-	CN1- 32b	-	CN2- 32a	61	CN2- 32b	62
CN1- 33a	-	CN1- 33b	-	CN2- 33a	63	CN2- 33b	64
CN1- 34a	88	CN1- 34b	87	CN2- 34a	65	CN2- 34b	66
CN1- 35a	86	CN1- 35b	85	CN2- 35a	67	CN2- 35b	68
CN1- 36a	84	CN1- 36b	83	CN2- 36a	69	CN2- 36b	70
CN1- 37a	82	CN1- 37b	81	CN2- 37a	71	CN2- 37b	72
CN1- 38a	80	CN1- 38b	79	CN2- 38a	-	CN2- 38b	-
CN1- 39a	78	CN1- 39b	77	CN2- 39a	73	CN2- 39b	74
CN1- 40a	76	CN1- 40b	-	CN2- 40a	75	CN2- 40b	-

(-: No connection)

Table 5 Connector correspondence (Using M3T-F160-100NSD)

CN1 No	IC No.	CN1 No.	IC No.	CN2 No.	IC No.	CN2 No.	IC No.
CN1- 1a	-	CN1- 1b	9	CN2- 1a	-	CN2- 1b	10
CN1- 2a	8	CN1- 2b	7	CN2- 2a	11	CN2- 2b	12
CN1- 3a	6	CN1- 3b	-	CN2- 3a	13	CN2- 3b	14
CN1- 4a	-	CN1- 4b	-	CN2- 4a	15	CN2- 4b	16
CN1- 5a	-	CN1- 5b	-	CN2- 5a	17	CN2- 5b	18
CN1- 6a	-	CN1- 6b	-	CN2- 6a	19	CN2- 6b	20
CN1- 7a	5	CN1- 7b	4	CN2- 7a	21	CN2- 7b	22
CN1- 8a	3	CN1- 8b	2	CN2- 8a	23	CN2- 8b	24
CN1- 9a	1	CN1- 9b	100	CN2- 9a	25	CN2- 9b	26
CN1- 10a	99	CN1- 10b	-	CN2- 10a	27	CN2- 10b	-
CN1- 11a	-	CN1- 11b	98	CN2- 11a	-	CN2- 11b	28
CN1- 12a	97	CN1- 12b	96	CN2- 12a	29	CN2- 12b	14
CN1- 13a	95	CN1- 13b	94	CN2- 13a	30	CN2- 13b	12
CN1- 14a	93	CN1- 14b	92	CN2- 14a	31	CN2- 14b	32
CN1- 15a	91	CN1- 15b	90	CN2- 15a	33	CN2- 15b	34
CN1- 16a	89	CN1- 16b	88	CN2- 16a	35	CN2- 16b	36
CN1- 17a	87	CN1- 17b	60	CN2- 17a	-	CN2- 17b	-
CN1- 18a	-	CN1- 18b	62	CN2- 18a	-	CN2- 18b	-
CN1- 19a	-	CN1- 19b	-	CN2- 19a	37	CN2- 19b	38
CN1- 20a	-	CN1- 20b	-	CN2- 20a	39	CN2- 20b	-
CN1- 21a	-	CN1- 21b	-	CN2- 21a	-	CN2- 21b	40
CN1- 22a	-	CN1- 22b	-	CN2- 22a	-	CN2- 22b	12
CN1- 23a	-	CN1- 23b	86	CN2- 23a	-	CN2- 23b	14
CN1- 24a	85	CN1- 24b	84	CN2- 24a	-	CN2- 24b	-
CN1- 25a	83	CN1- 25b	-	CN2- 25a	41	CN2- 25b	42
CN1- 26a	-	CN1- 26b	-	CN2- 26a	43	CN2- 26b	44
CN1- 27a	-	CN1- 27b	-	CN2- 27a	-	CN2- 27b	-
CN1- 28a	82	CN1- 28b	81	CN2- 28a	-	CN2- 28b	45
CN1- 29a	80	CN1- 29b	79	CN2- 29a	46	CN2- 29b	47
CN1- 30a	78	CN1- 30b	-	CN2- 30a	48	CN2- 30b	-
CN1- 31a	-	CN1- 31b	77	CN2- 31a	-	CN2- 31b	49
CN1- 32a	76	CN1- 32b	75	CN2- 32a	14	CN2- 32b	50
CN1- 33a	74	CN1- 33b	73	CN2- 33a	12	CN2- 33b	51
CN1- 34a	72	CN1- 34b	71	CN2- 34a	52	CN2- 34b	53
CN1- 35a	70	CN1- 35b	69	CN2- 35a	54	CN2- 35b	55
CN1- 36a	68	CN1- 36b	67	CN2- 36a	56	CN2- 36b	57
CN1- 37a	66	CN1- 37b	65	CN2- 37a	58	CN2- 37b	59
CN1- 38a	64	CN1- 38b	63	CN2- 38a	-	CN2- 38b	-
CN1- 39a	62	CN1- 39b	61	CN2- 39a	-	CN2- 39b	-
CN1- 40a	60	CN1- 40b	-	CN2- 40a	-	CN2- 40b	-

(-: No connection)

Table 6 Connector correspondence (Using M30800T-PTC)

CN1 No	IC No.	CN1 No.	IC No.	CN2 No.	IC No.	CN2 No.	IC No.
CN1- 1a	GND	CN1- 1b	11	CN2- 1a	GND	CN2- 1b	12
CN1- 2a	10	CN1- 2b	9	CN2- 2a	13	CN2- 2b	14, 64
CN1- 3a	8	CN1- 3b	-	CN2- 3a	15	CN2- 3b	16
CN1- 4a	-	CN1- 4b	-	CN2- 4a	17	CN2- 4b	18
CN1- 5a	-	CN1- 5b	-	CN2- 5a	19	CN2- 5b	20
CN1- 6a	-	CN1- 6b	-	CN2- 6a	21	CN2- 6b	22
CN1- 7a	7	CN1- 7b	6	CN2- 7a	23	CN2- 7b	24
CN1- 8a	5	CN1- 8b	4	CN2- 8a	25	CN2- 8b	26
CN1- 9a	3	CN1- 9b	2	CN2- 9a	27	CN2- 9b	28
CN1- 10a	1	CN1- 10b	GND	CN2- 10a	29	CN2- 10b	GND
CN1- 11a	GND	CN1- 11b	100	CN2- 11a	GND	CN2- 11b	30
CN1- 12a	99	CN1- 12b	98	CN2- 12a	31	CN2- 12b	16
CN1- 13a	97	CN1- 13b	96	CN2- 13a	32	CN2- 13b	14, 64
CN1- 14a	95	CN1- 14b	94	CN2- 14a	33	CN2- 14b	34
CN1- 15a	93	CN1- 15b	92	CN2- 15a	35	CN2- 15b	36
CN1- 16a	91	CN1- 16b	90	CN2- 16a	37	CN2- 16b	38
CN1- 17a	89	CN1- 17b	62	CN2- 17a	-	CN2- 17b	-
CN1- 18a	-	CN1- 18b	14, 64	CN2- 18a	-	CN2- 18b	-
CN1- 19a	-	CN1- 19b	-	CN2- 19a	39	CN2- 19b	40
CN1- 20a	-	CN1- 20b	GND	CN2- 20a	41	CN2- 20b	GND
CN1- 21a	GND	CN1- 21b	-	CN2- 21a	GND	CN2- 21b	42
CN1- 22a	-	CN1- 22b	-	CN2- 22a	-	CN2- 22b	14, 64
CN1- 23a	-	CN1- 23b	88	CN2- 23a	-	CN2- 23b	16
CN1- 24a	87	CN1- 24b	86	CN2- 24a	-	CN2- 24b	-
CN1- 25a	85	CN1- 25b	-	CN2- 25a	43	CN2- 25b	44
CN1- 26a	-	CN1- 26b	-	CN2- 26a	45	CN2- 26b	46
CN1- 27a	-	CN1- 27b	-	CN2- 27a	-	CN2- 27b	-
CN1- 28a	84	CN1- 28b	83	CN2- 28a	-	CN2- 28b	47
CN1- 29a	82	CN1- 29b	81	CN2- 29a	48	CN2- 29b	49
CN1- 30a	80	CN1- 30b	GND	CN2- 30a	50	CN2- 30b	GND
CN1- 31a	GND	CN1- 31b	79	CN2- 31a	GND	CN2- 31b	51
CN1- 32a	78	CN1- 32b	77	CN2- 32a	16	CN2- 32b	52
CN1- 33a	76	CN1- 33b	75	CN2- 33a	14, 64	CN2- 33b	53
CN1- 34a	74	CN1- 34b	73	CN2- 34a	54	CN2- 34b	55
CN1- 35a	72	CN1- 35b	71	CN2- 35a	56	CN2- 35b	57
CN1- 36a	70	CN1- 36b	69	CN2- 36a	58	CN2- 36b	59
CN1- 37a	68	CN1- 37b	67	CN2- 37a	60	CN2- 37b	61
CN1- 38a	66	CN1- 38b	65	CN2- 38a	-	CN2- 38b	-
CN1- 39a	14, 64	CN1- 39b	63	CN2- 39a	-	CN2- 39b	-
CN1- 40a	62	CN1- 40b	GND	CN2- 40a	-	CN2- 40b	GND

(-: No connection)