

MPU-IMC

MIDI PROCESSING UNIT

SERVICE NOTES

First Edition

SPECIFICATIONS

Dimensions

Connector Box : 165 (W) x 50 (D) x 31 (H) mm
 6-1/2 x 1-15/16 x 1-1/4 inch
 Interface Card : 318 (W) x 107 (D) x 22 (H) mm
 12-1/2 x 4-3/16 x 7/8 inch

Weight

Connector Box : 400g / 14 oz. (including the cable)
 Interface Card : 150g / 5 oz.

Accessories

: Owner's Manual (including MPU-IMC ADF Disk : 2240020000) : 7594621900
 取扱説明書 (MPU-IMC ADF Disk : 2240020000 を含む) : 7594621100
 MPU-IMC ADF Disk (3.5 inch Floppy Disk) : 2240020000

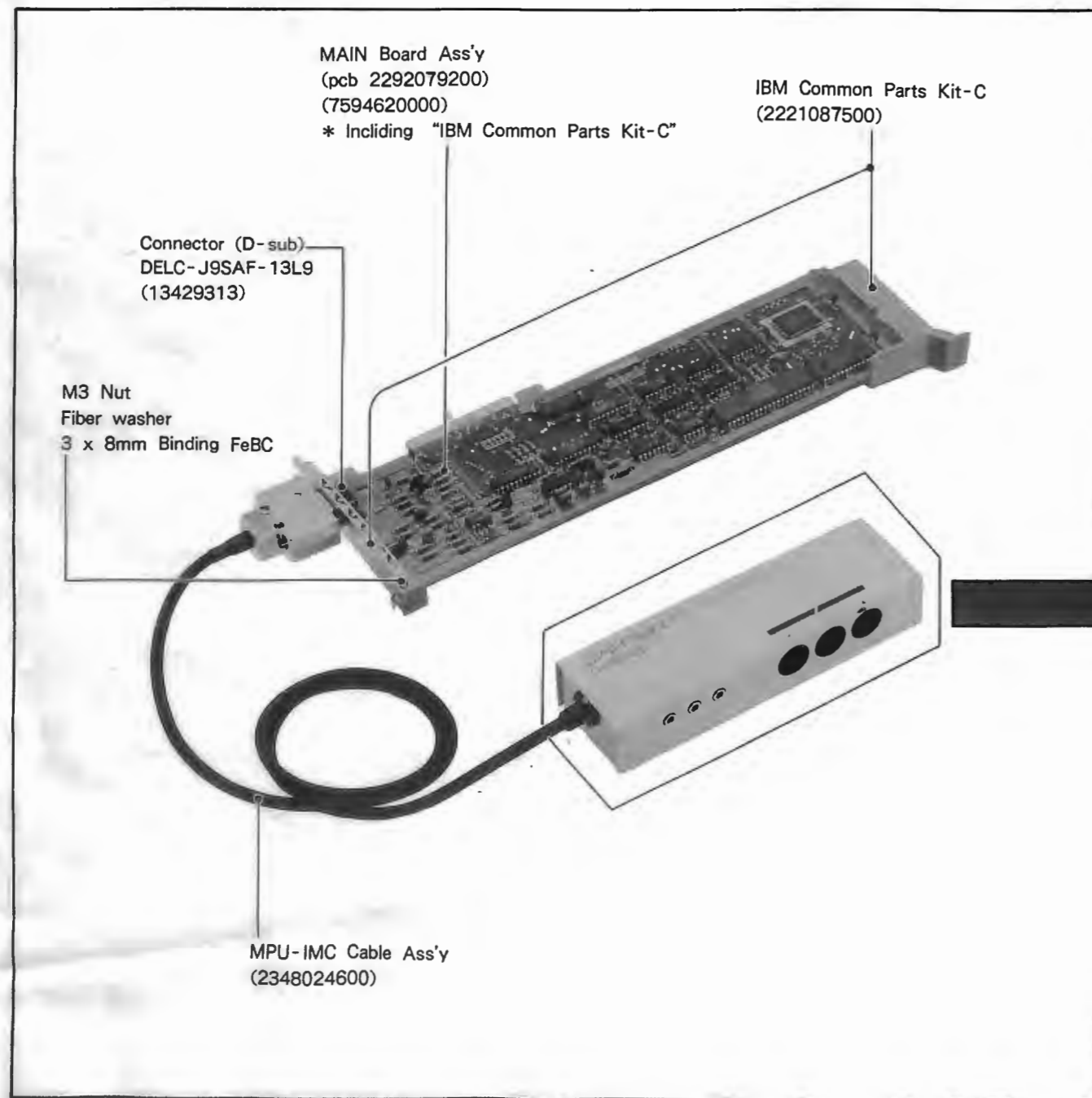


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EXPLODED VIEW (Connector Box)

分解図 (コネクタ・ボックス)

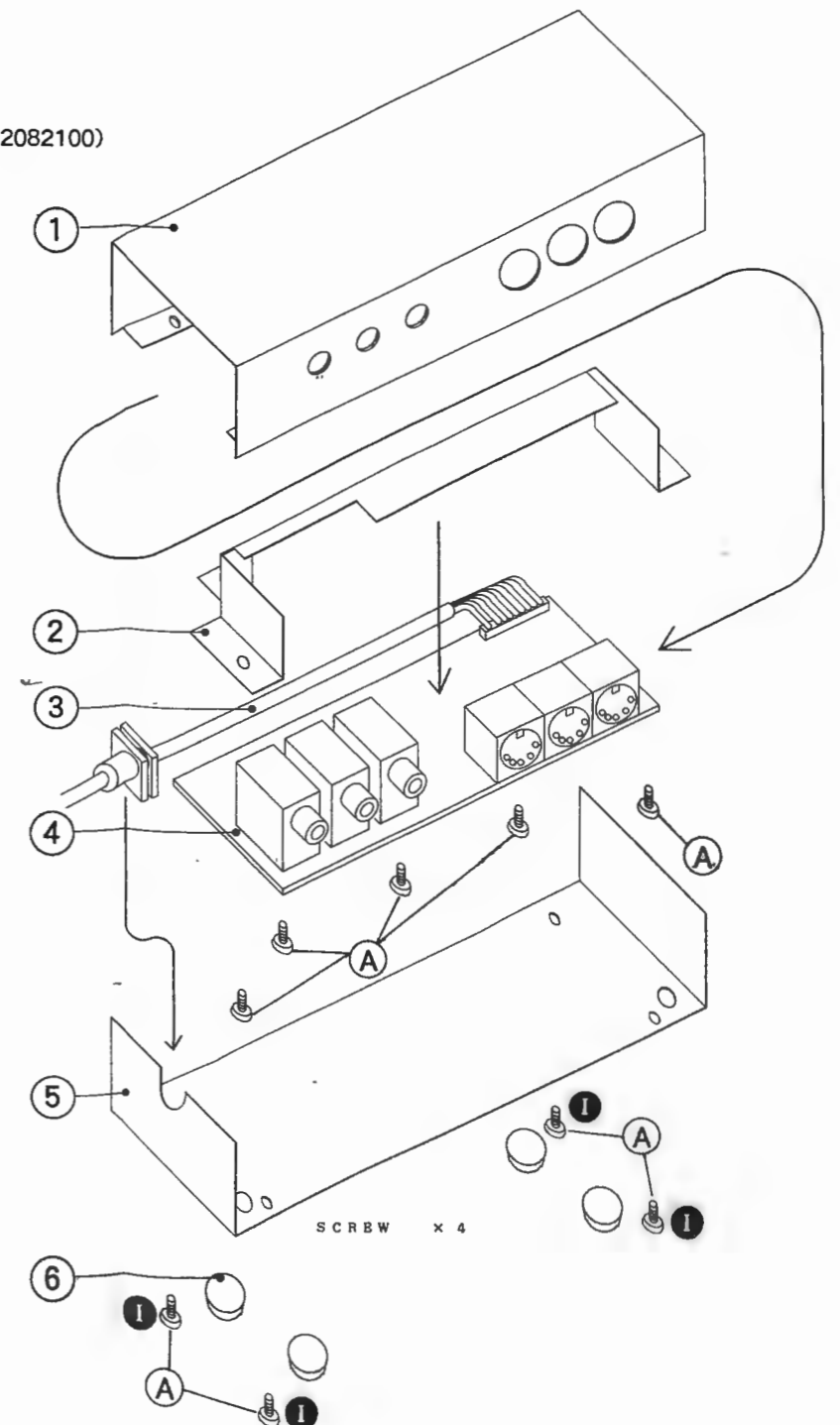
PARTS

- ① 2281071100 Top Cover
- ② 2219089500 Holder # 895
- ③ 2348024600 MPU-IMC Cable Ass'y
- ④ 7594631000 Connector Board Ass'y (pcb 2292082100)
- ⑤ 2281069100 Bottom Cover
- ⑥ ***** Rubber Foot SJ5012

SCREWS

- Ⓐ M3 x 8mm Binding FeBC S-tight with washer

Bottom Cover removal screws ① x 4 pcs.



PARTS LIST

SAFETY PRECAUTIONS:
 The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.
 安全上の注意：
 Δ が付いている部品は、安全上特別な規格でつくられたものです。交換の際は、指定された部品番号以外の部品は使わないようにして下さい。

CONSIDERATIONS ON PARTS ORDERING
 When ordering any parts listed in the parts list, please specify the following items in the order sheet.

QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex. 10	22575241	Sharp Key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

 Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.
 パーツ発注に関するお願い
 オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)

必要数	パーツナンバー	品名	使用機種
例) 10	22575241	Sharp Key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

 もし記入漏れ、誤記等がある場合、必要部品が発送出来なかったり、大層な遅れの原因になります。御協力をお願いします。

<< Cautionary points in returning a PCB when repair is impossible. >>
 When returning a PCB that cannot be repaired, first pack the PCB carefully and then clearly enter all necessary information in the sheet (see below) and always include it with the PCB.
<<修理不可能で基板を返却する場合の注意点>>
 修理不可能で基板を返却する場合、必要事項(詳細は下記参照)を明記して、必ず対象の返却基板に添えて返却して下さい。又、その際基板は、丁寧に梱包して返却するようにして下さい。
Necessary Information
 必要事項

1. Company Name	2. Model	3. Serial Number	4. Symptom
サービス名	機種名	製造番号	症状

Interface Card

CASING	ケース
2295011700	IBM Common Parts Kit - C

PCB ASS'Y	基板完成品
E 7594620000	Main Board (pcb 2292079200) Including "IBM Common Parts Kit - C" "IBM Common Parts Kit - C" を含む。

IC			
15179222	HD6801V0B55P	CPU (Including Mask ROM)	IC3 on Main Board
15239133	HG62E08R10FS	Handshake Controller	IC2
15179406	LC3517AC-15	16kbit S RAM	IC1
or 15179322	HM-6116P-4		
15159124H0	HD14093BP	Quad 2-Input NAND Schmitt Triggers	IC14
15169303H0	HD74LS02P	Quad 2-Input NOR Gate	IC5
15169304H0	HD74LS04P	Hex Inverter	IC8
15169334H0	HD74LS05P	Hex Inverter with Open Collector Output	IC4, 6
15169339H0	HD74LS32P	Quad 2-Input OR Gate	IC7
15169311H0	HD74LS74P	Dual D Flip Flop	IC9
15169313H0	HD74LS86P	Quad 2-Input Exclusive OR Gate	IC12
15169318H0	HD74LS138P	3 to 8 Line Decoder	IC10
15169380	M74LS688P	8 bit Equality Cmpparator	IC13, 15
15169613	M74ALS573AP	D-type Latch with 3 State Output	IC11
15189171	M5218P	Dual Op Amp	IC16

TRANSISTOR	トランジスタ	
15129114	2SC-1815GR	All Transistors on Main Board

DIODE	ダイオード	
15019125	1SS-133	All Diodes on Main Board

INDUCTANCE	インダクタンス		
12399501M1	BLO2RN2-R62	Fairrite Beads	L1, 5 on Main Board
13529105M1	DSS310-55D223S	EMI Filter	FL1, 7
13529183	EXCEMT101BC	EMI Filter	FL2-6

X'TAL	発振子		
12389715	KMFC-1002T	4MHz (Including Capacitor 30pF x 2)	X1 on Main Board

RESISTOR ARRAY	抵抗アレイ		
13919303	RML S8 333J	33k Ω x 8	RA1 on Main Board

CONNECTOR	コネクタ	
13429313	DEL C-J9SAF-13L9	D-sub Connector

SCREWS	ネジ類	
*****	M3 Nut	2 pcs.
*****	Fiber washer	1 pcs.
*****	3 x 8mm Binding FeBC	2 pcs.

Connector Box

CASING	ケース
2281071100	Top Cover
2281069100	Bottom Cover
2219089500	Holder 219-895
*****	Rubber Foot SJ5012

PCB ASS'Y	基板完成品
7594631000	Connector Board (pcb 2292082100)

JACK	ジャック		
13449424	TCS0700-01-0101	MIDI IN, OUT, THRU	JK1-3 on Connector Board
13449418	HSJ0833-01-030	TAPE IN, OUT, METORONOME	JK5-7

IC			
15169334H0	HD74LS05P	Hex Inverter with Open Collector Output	IC2 on Connector Board
15229712	PC900	Photo Coupler	IC1

DIODE	ダイオード	
15019103	1S-2473	D3 on Connector Board

SCREWS	ネジ類	
*****	M3 x 8mm Binding FeBC S-tight with washer	9pcs.
*****	M3 tooth washer	2pcs.

MISCELLANEOUS	その他	
12389711	PKM24-4A0	Piezo-Buzzer
2348024600	MPU-IMC Cable Ass'y	

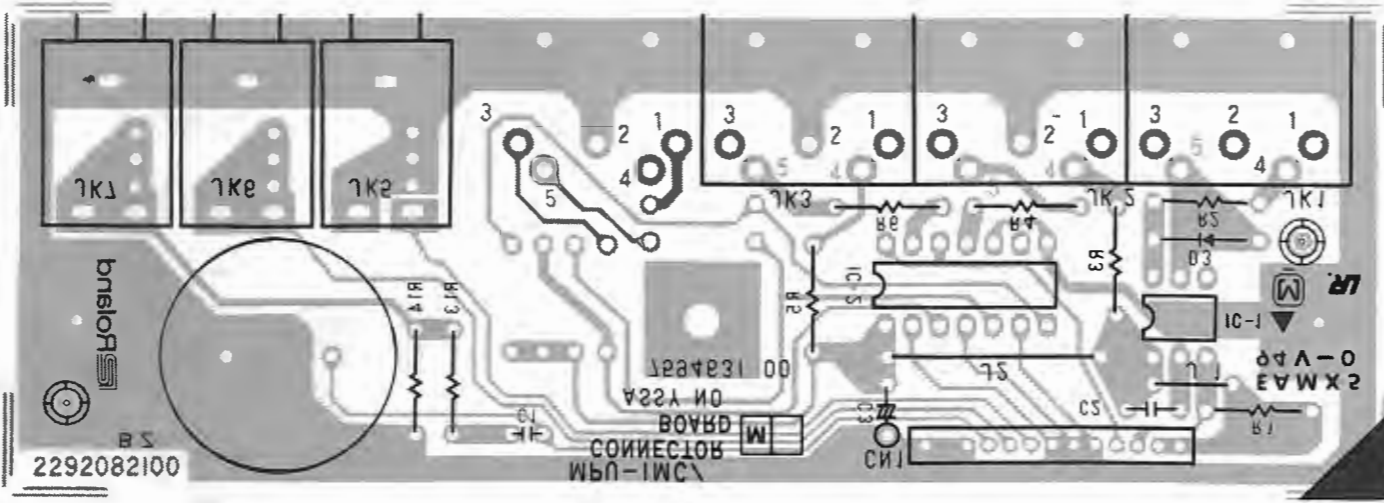
ACCESSORIES	付属品
7594621900	Owner's Manual (including MPU-IMC ADF Disk : 2240020000)
7594621100	取扱説明書 (MPU-IMC ADF Disk : 2240020000 を含む)
2240020000	MPU-IMC ADF Disk (3.5inch Floppy Disk)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

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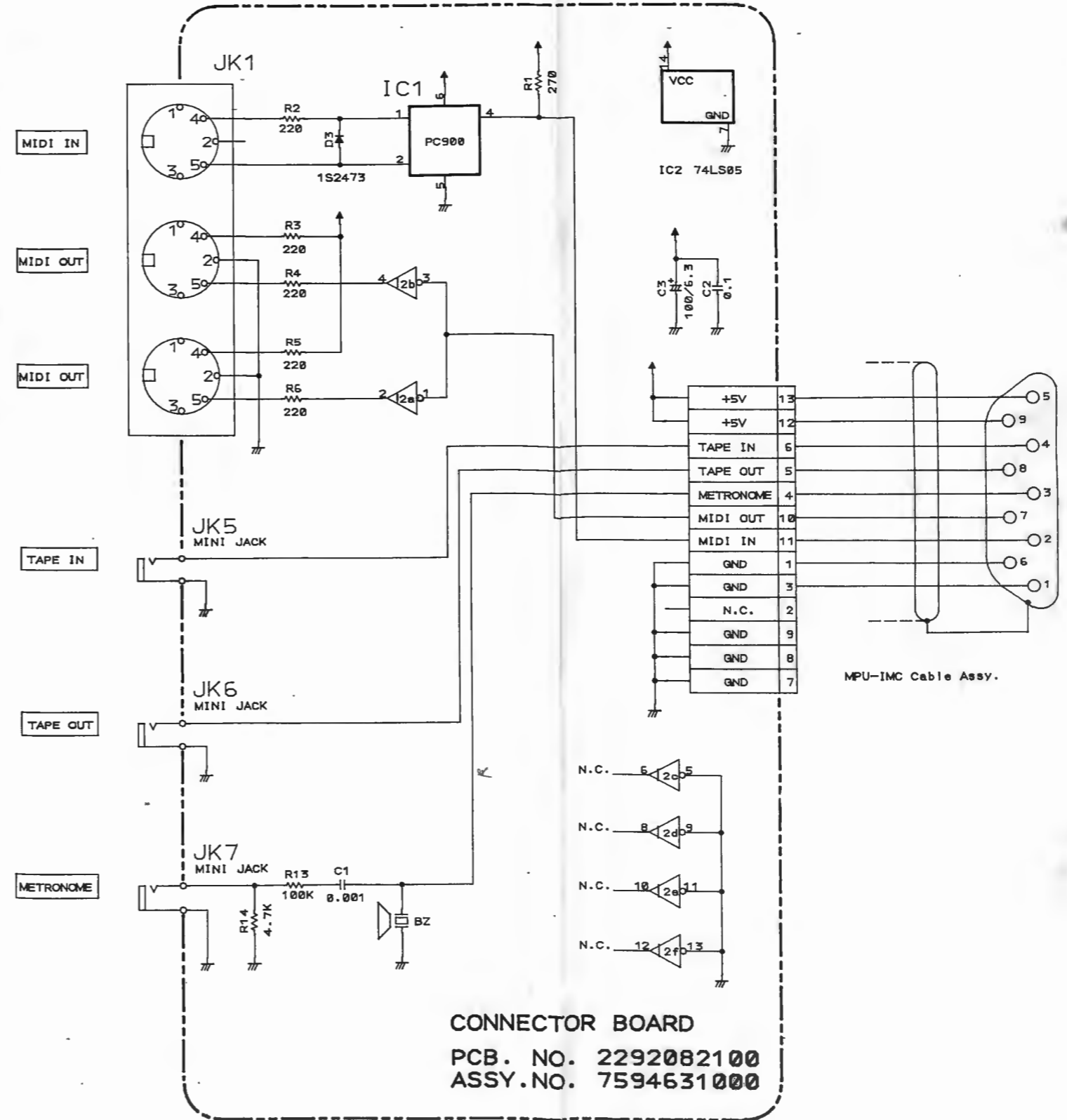
CONNECTOR BOARD

ASSY 7594631000
(pcb 2292082100)



View from foil side.

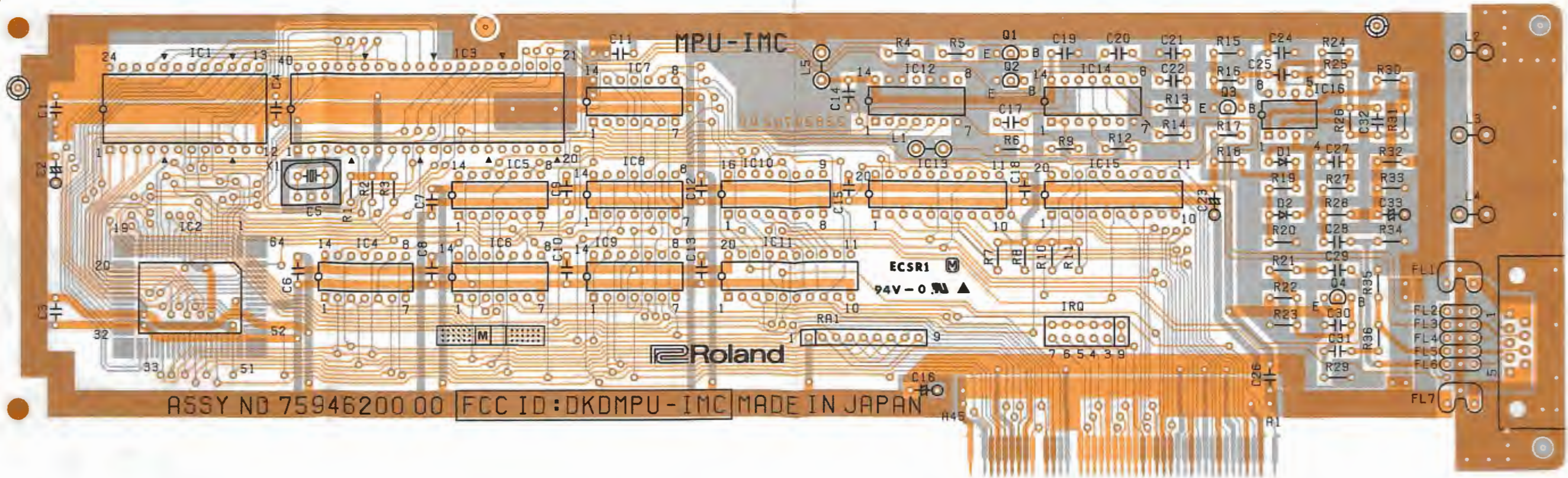
CIRCUIT DIAGRAM (Connector Box)



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

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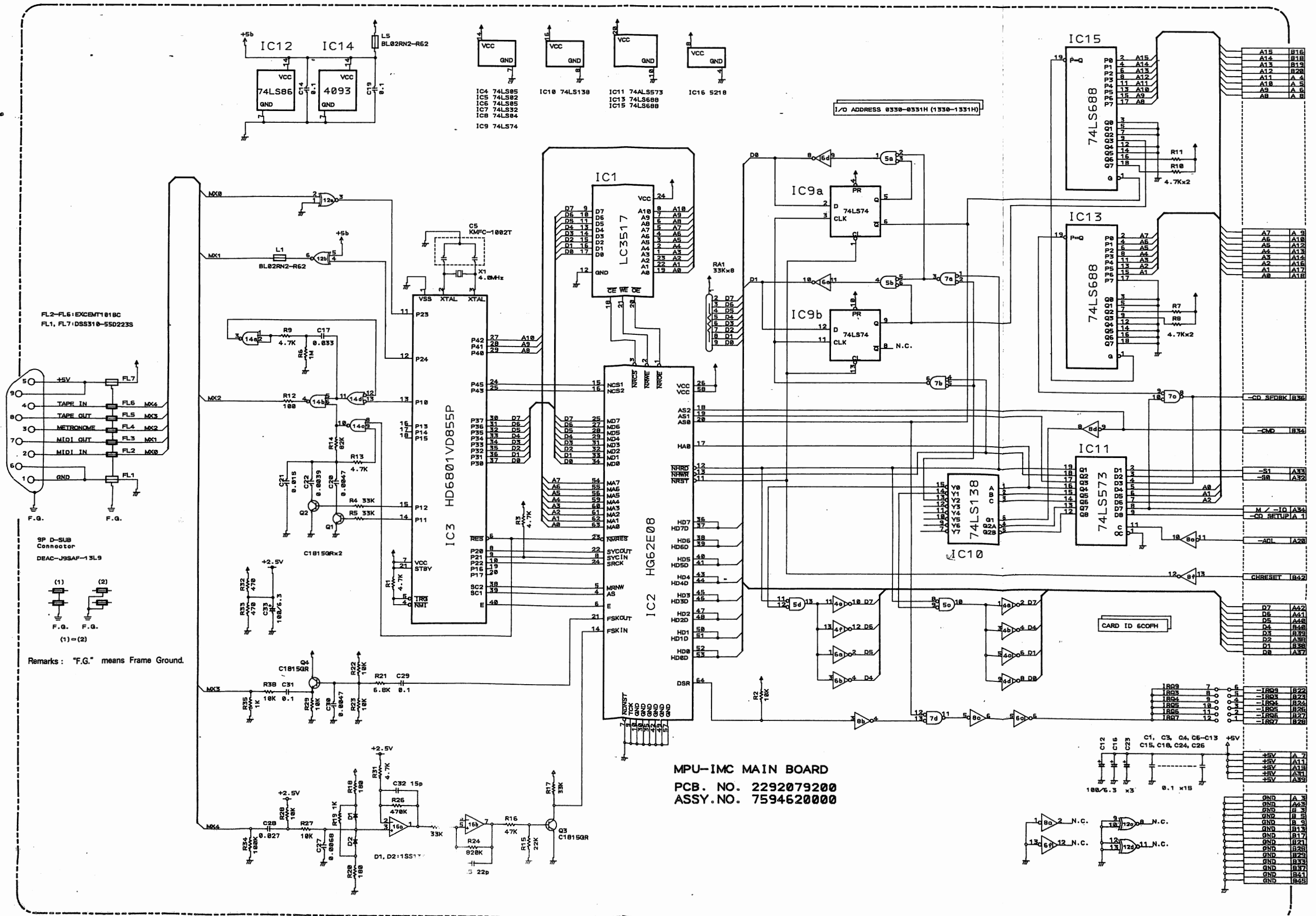
E MAIN BOARD
ASSY 7594620000
(pcb 2292079200)



View from component side.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

CIRCUIT DIAGRAM (Interface Card)



FL2-FL6: EXCEM1818C
FL1, FL7: DSS310-550223S

SP D-SUB Connector
DEAC-J9SAF-13L9

Remarks: "F.G." means Frame Ground.

MPU-IMC MAIN BOARD
PCB. NO. 2292079200
ASSY. NO. 7594620000

IR09	7	0	0	5	-IR09	B22
IR03	8	0	0	4	-IR03	B23
IR04	9	0	0	4	-IR04	B24
IR05	10	0	0	2	-IR05	B25
IR06	11	0	0	2	-IR06	B26
IR07	12	0	0	1	-IR07	B28

C12	C16	C23	C1, C3, C4, C6-C13	+5V
C15, C18, C24, C26				
180/6.5	x3	0.1	x15	

GND	A 7
GND	A 11
GND	A 15
GND	A 19
GND	A 23
GND	A 27
GND	A 31
GND	A 35
GND	A 39
GND	A 43
GND	A 47
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GND	A 579
GND	A 583
GND	A 587
GND	A 591
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