MODEL 2000CPU

CONTROLLING PROCESSOR CARD

The Model 2000CPU Controlling Processor card is a component of the IED Series 2000 UDAPS™. Its functions in the system include digital interfacing between the 2022M and the 2012M, providing clock signals for the 2022M, and serial interfacing with the 590 Microcomputer. The 2000CPU utilizes an 80186 microprocessor.

The 2000CPU is designed to be mounted in the 2022M Mainframe, through which its power and signal connections are made. It has its own dedicated slot in which it must be installed, which is slot number 22 at the extreme right of the 2022M Mainframe as viewed from the front.

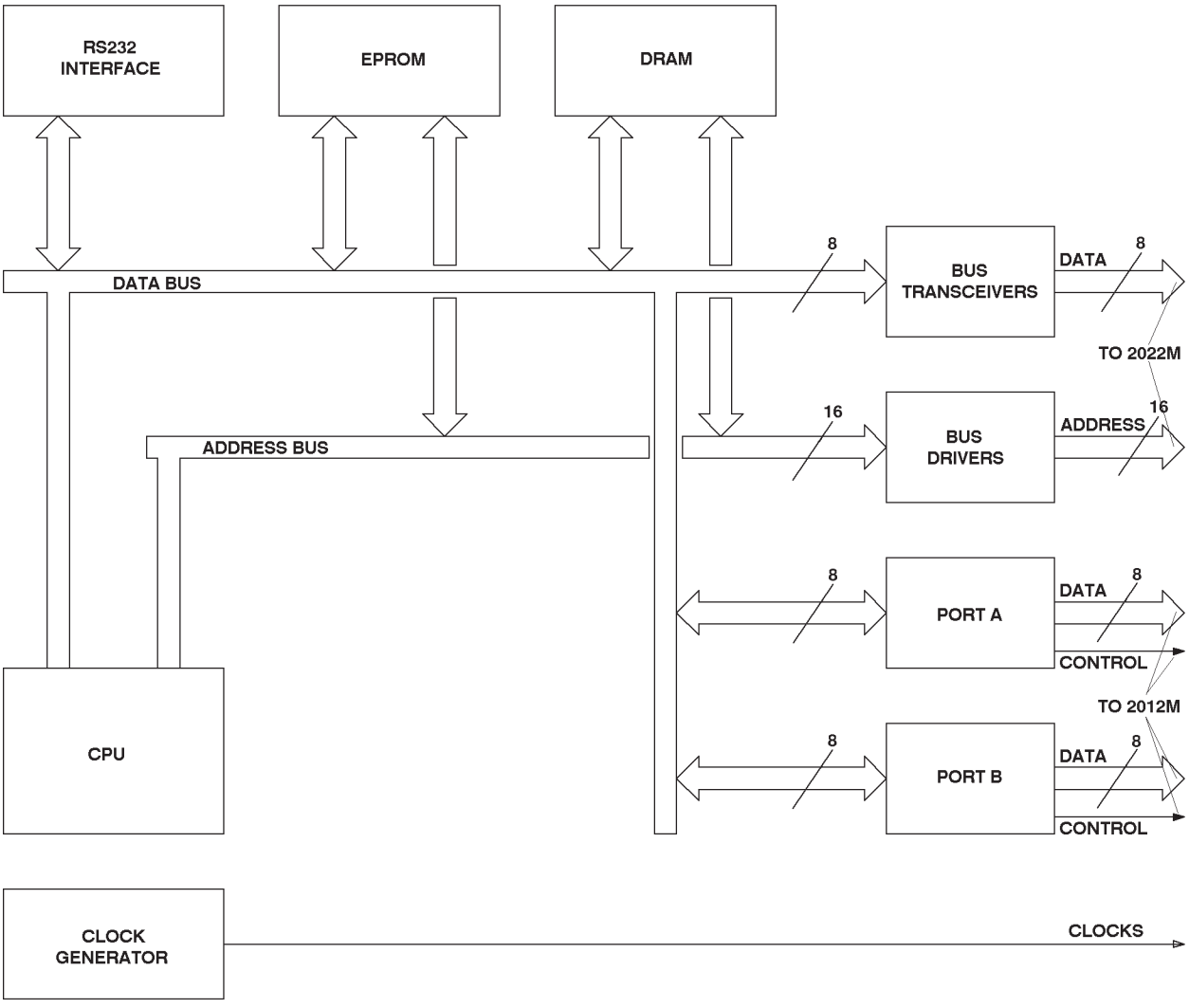

Figure 1 - 2000CPU Block Diagram

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SPECIFICATIONS

ELECTRICAL, ANALOG

1. Power Supply
   Supply Voltage Range
   +5 V supply. . . . . 4.75 V - 5.25 V
   Supply Current
   V= +5 V . . . . . 1 A

CONTROLS

1. Reset. . . . . Momentary Push Switch

INDICATORS

1. Card Operating . . . . . Green LED
2. CPU Fault. . . . . Red LED

CONNECTORS

1. 100-pin Euro connector (male) . . . . . Hirose PCN13-100S-2.54DS
   For card connector pin connections see Table 1, page 3.

MECHANICAL

1. Size (maximum overall dimensions as viewed from front)
   Height . . . . . (16.3 cm) 6.42"
   Width. . . . . (2.16 cm) 0.85"
   Depth . . . . . (32.84 cm) 12.93"
2. Weight . . . . . (440 gm) 0.970 lb

ENVIRONMENTAL

1. Operating Temperature Range . . . . . (+32 °F - +104 °F) 0 °C - +40 °C
2. Storage Temperature Range . . . . . (–40 °F - +158 °F) –40 °C - +70 °C

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PIN	FUNCTION	PIN	FUNCTION
1	Lower Address Strobe A (Inverted)	51	Upper Address Strobe A (Inverted)
2	Acknowledge A	52	Read A (Inverted)
3	Card Address A-6	53	Card Address A-7
4	Card Address A-0	54	Address A-4
5	Card Address A-1	55	Card Address A-2
6	Card Address A-5	56	Card Address A-3
7	Lower Address Strobe B (Inverted)	57	Upper Address Strobe B (Inverted)
8	Write B (Inverted)	58	Read B (Inverted)
9	Address B-7	59	Acknowledge B
10	Address B-5	60	Address B-6
11	Address B-3	61	Address B-4
12	Address B-0	62	Address B-1
13	Ground	63	Ground
14	Write A (Inverted)	64	Ground
15	Address B-2	65	Ground
16	Serial Clock	66	Serial Sync
17	Control Address Strobe (Inverted)	67	Control Write (Inverted)
18	Swap	68	Disable (Inverted)
19	Parallel Clock	69	Parallel Sync
20	Control Acknowledge (Inverted)	70	Spare Bus
21	Control Data 6	71	Control Data 7
22	Control Data 4	72	Control Data 5
23	Control Data 2	73	Control Data 3
24	Control Data 0	74	Control Data 1
25	Control Address 14	75	Control Address 15
26	Control Address 12	76	Control Address 13
27	Control Address 10	77	Control Address 11
28	Control Address 8	78	Control Address 9
29	Control Address 6	79	Control Address 7
30	Control Address 4	80	Control Address 5
31	Control Address 2	81	Control Address 3
32	Control Address 0	82	Control Address 1
33	Digital Audio Data Bus B14	83	Digital Audio Data Bus B15
34	Digital Audio Data Bus B12	84	Digital Audio Data Bus B13
35	Digital Audio Data Bus B10	85	Digital Audio Data Bus B11
36	Digital Audio Data Bus B8	86	Digital Audio Data Bus B9
37	Digital Audio Data Bus B6	87	Digital Audio Data Bus B7
38	Digital Audio Data Bus B4	88	Digital Audio Data Bus B5
39	Digital Audio Data Bus B2	89	Digital Audio Data Bus B3

Table 1 - 20000CPU Card Connector Pin Connections

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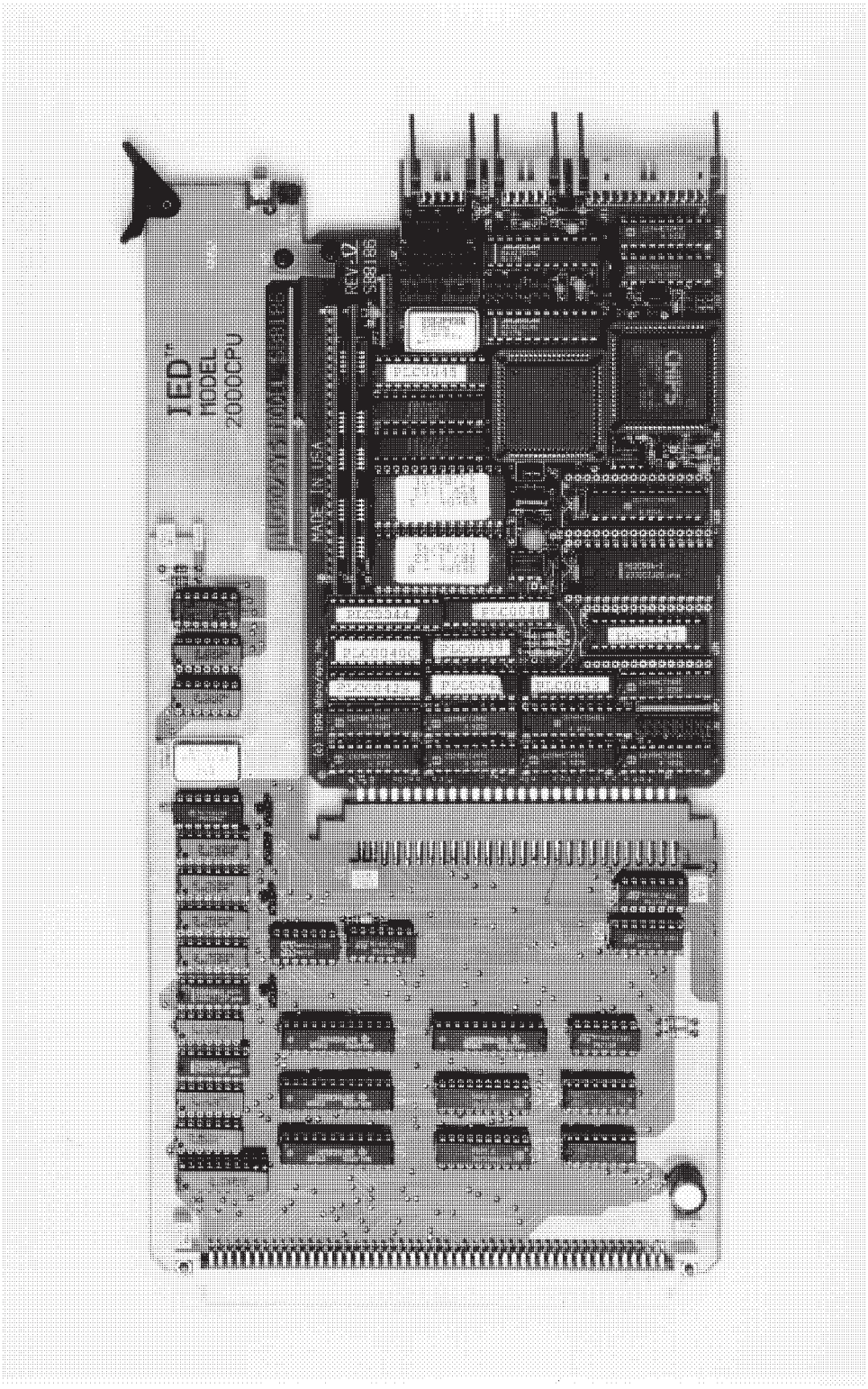

Figure 2 - 2000CPU Card

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