Redhawk Systems Limited

CTL Modular One System catalogue

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Modular one Computer 1.14

Complete in chassis with Power door and 16K of RAM fitted.

1. High speed paper tape reader

GNT Automatic A/S Paper tape reader in CTL Livery with device number 1.32.

2. Teletypes

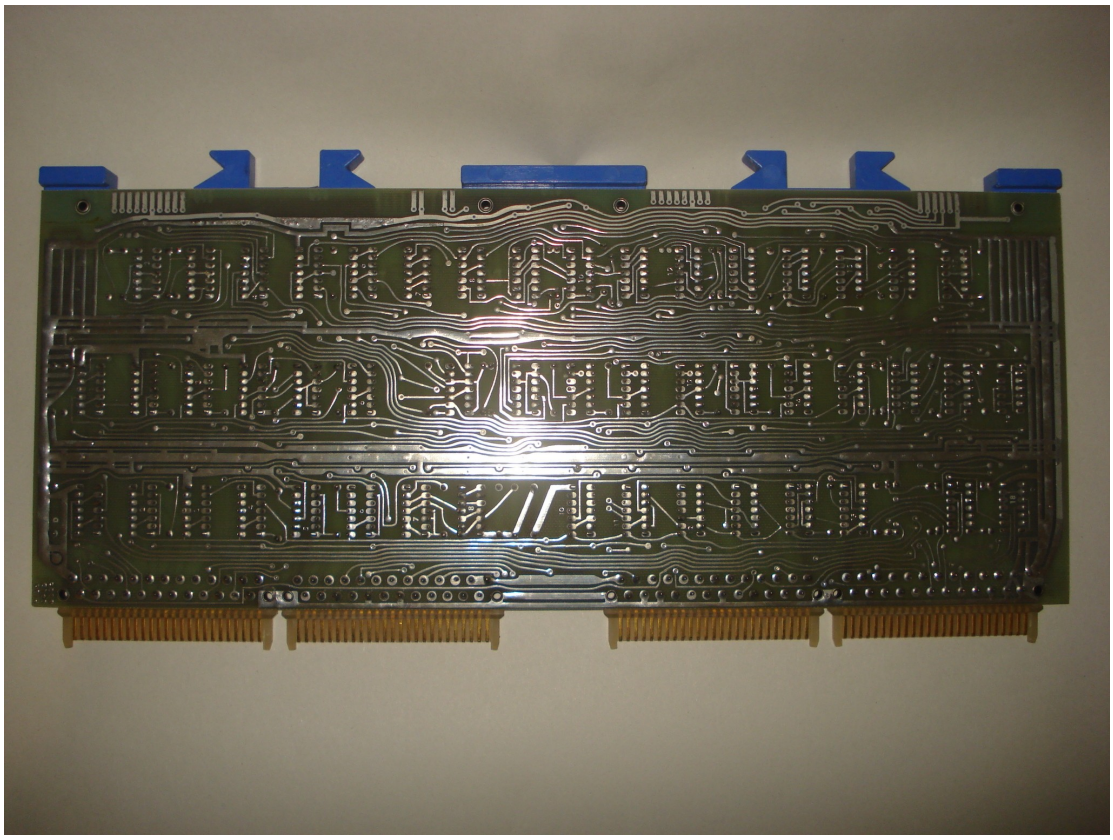
2 Teletype Corporation Teletypes with keyboard, printer, paper tape reader, and paper tape punch with stands.

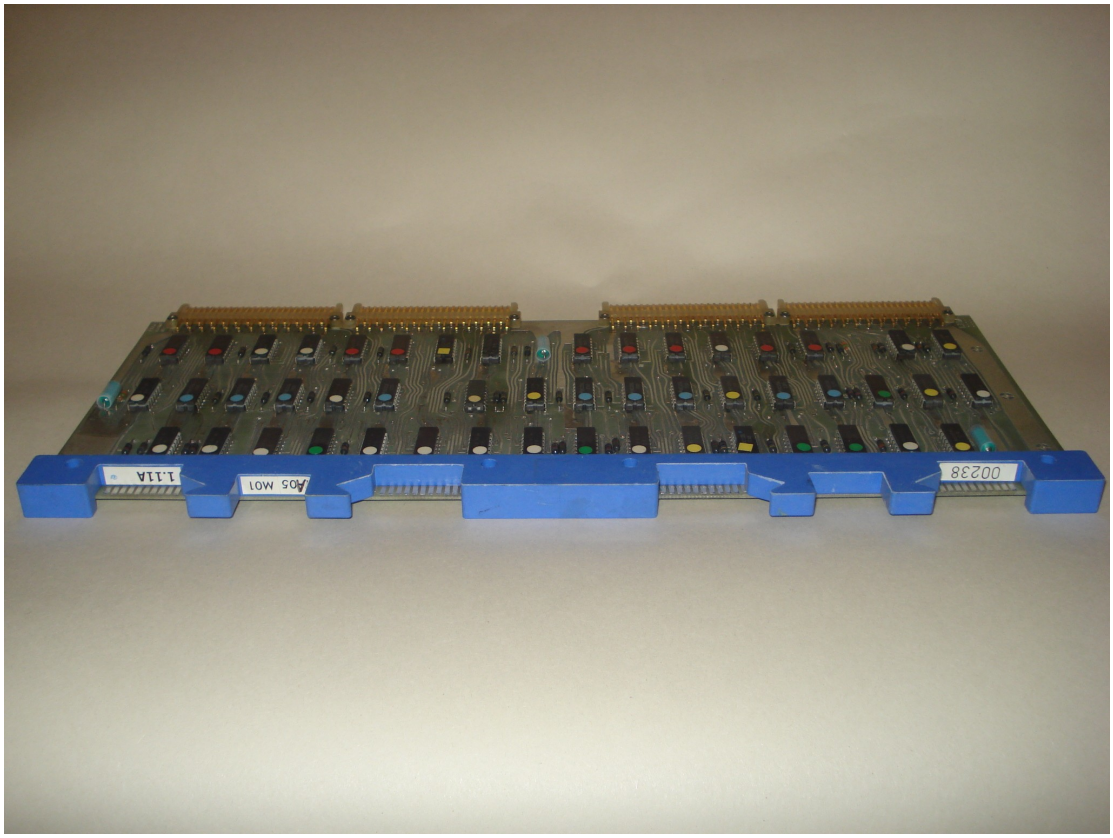
3. Spare parts

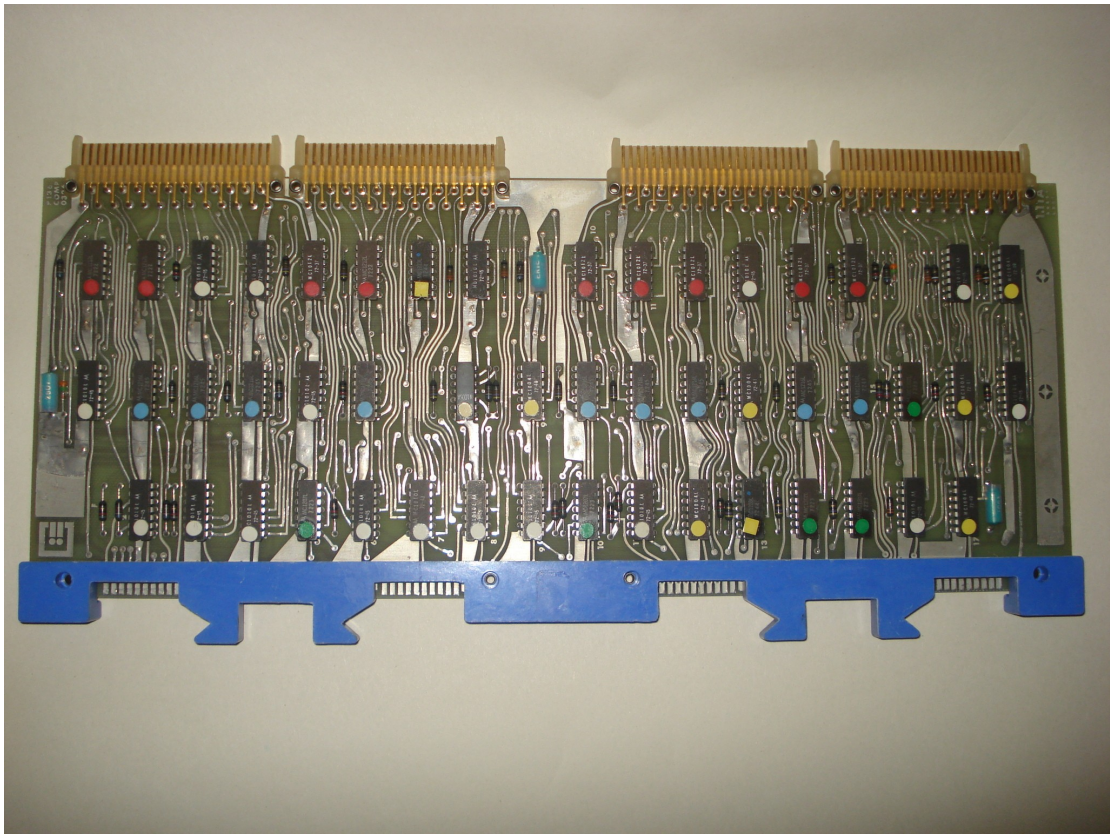
3.1. Computer boards

Type	Archive & Mod No.	Serial number	Description	Condition
1.11A	A05 M01	00238	Register Board bits 14 & 15	Good
1.11B	A05 M00	00238	Register Board bits 12 & 13	Good
1.11C	A05 M00	00241	Register Board bits 10 & 11	Good
1.11D	A04 M01	00237	Register Board bits 8 & 9	Good
1.11E	A05 M01	00235	Register Board bits 6 & 7	Good
1.11F	A05 M01	00236	Register Board bits 4 & 5	Good
1.11G	A05 M00	00233	Register Board bits 2 & 3	Good
1.11H	A04 M00	00229	Register Board bits 0 & 1	Good
1.11J	A05 M01	00236	Control Board, Complex Arithmetic	Good
1.11K	A07 M03	00246	Control Board, Instruction	Modified
1.11L	A05 M02	00256	Control Board, Clock	Modified
1.11M	A06 M00	00235	Control Board, Register Operation	Good
1.11N	A05 M03	00101	Control Board, Simple Arithmetic	Modified
1.11P	A06 M03	00035	Multiplexer Board	Black connectors
1.11Q	A08 M03	00396	Processor Interface Board Dated 2/12/75	Modified
1.11R	A05 M01	00241	Control Board, Program Change	Modified

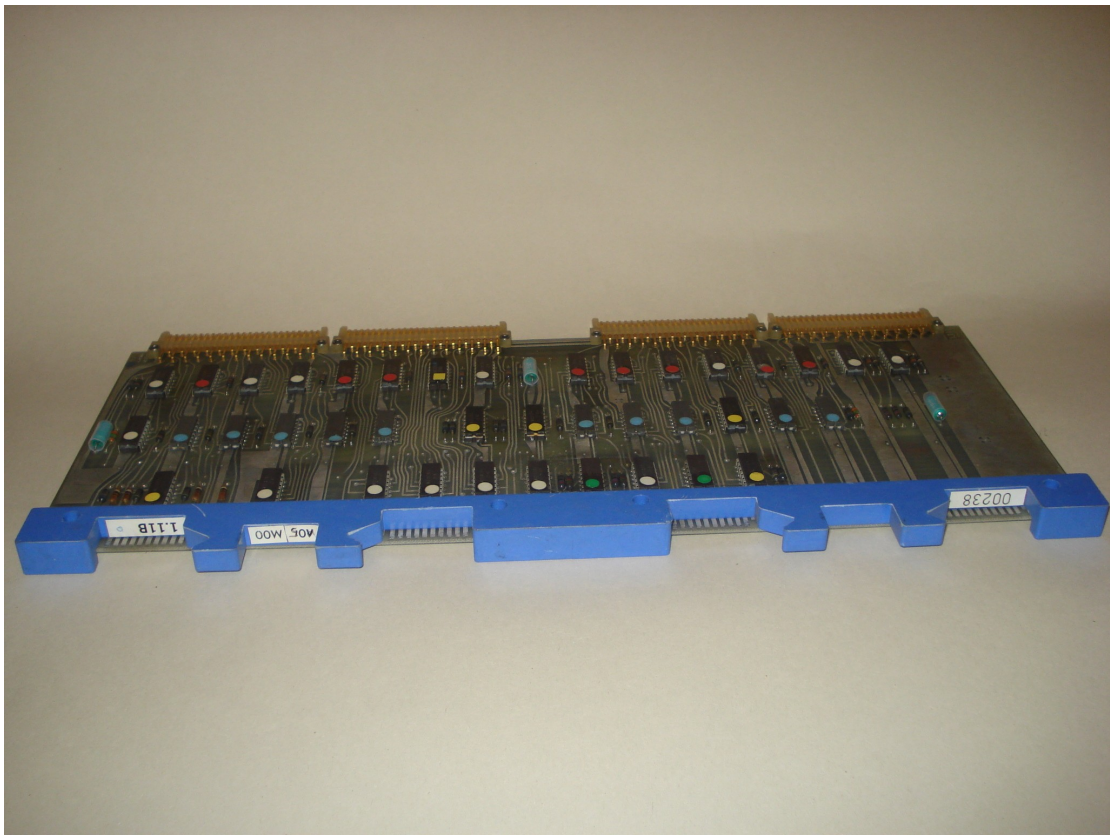
1.11A Register Board bits 14 & 15

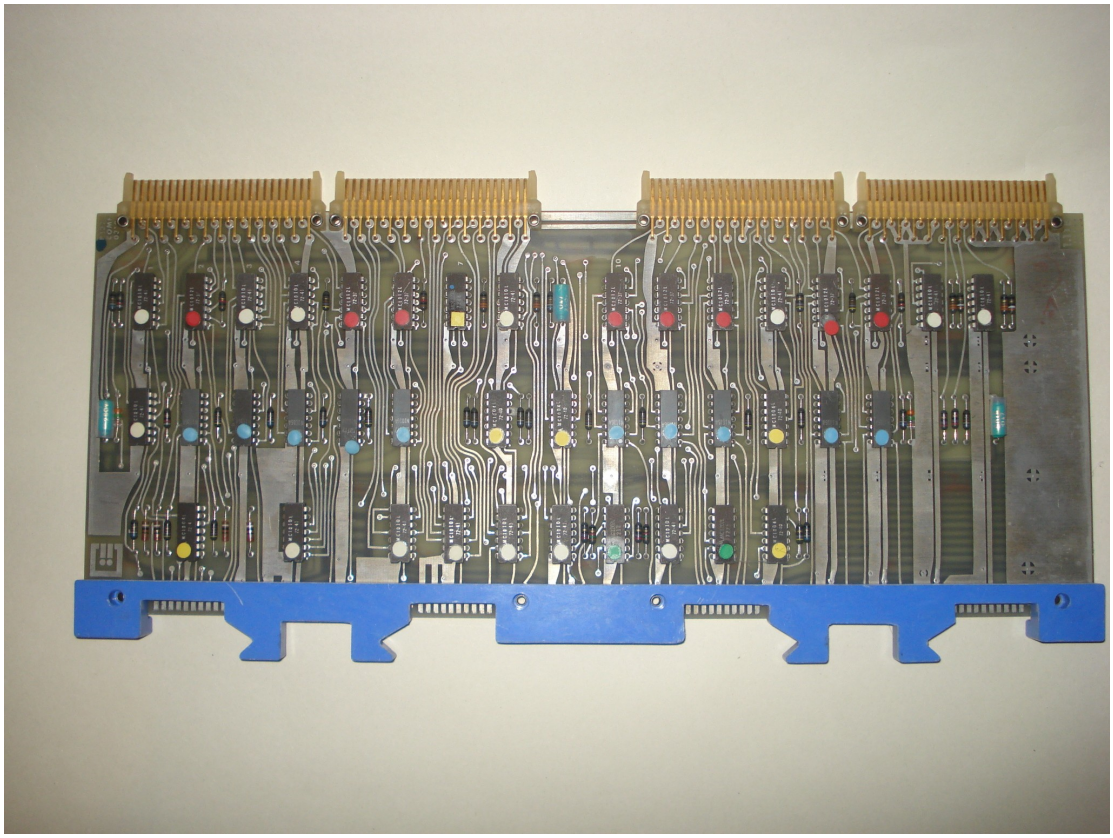


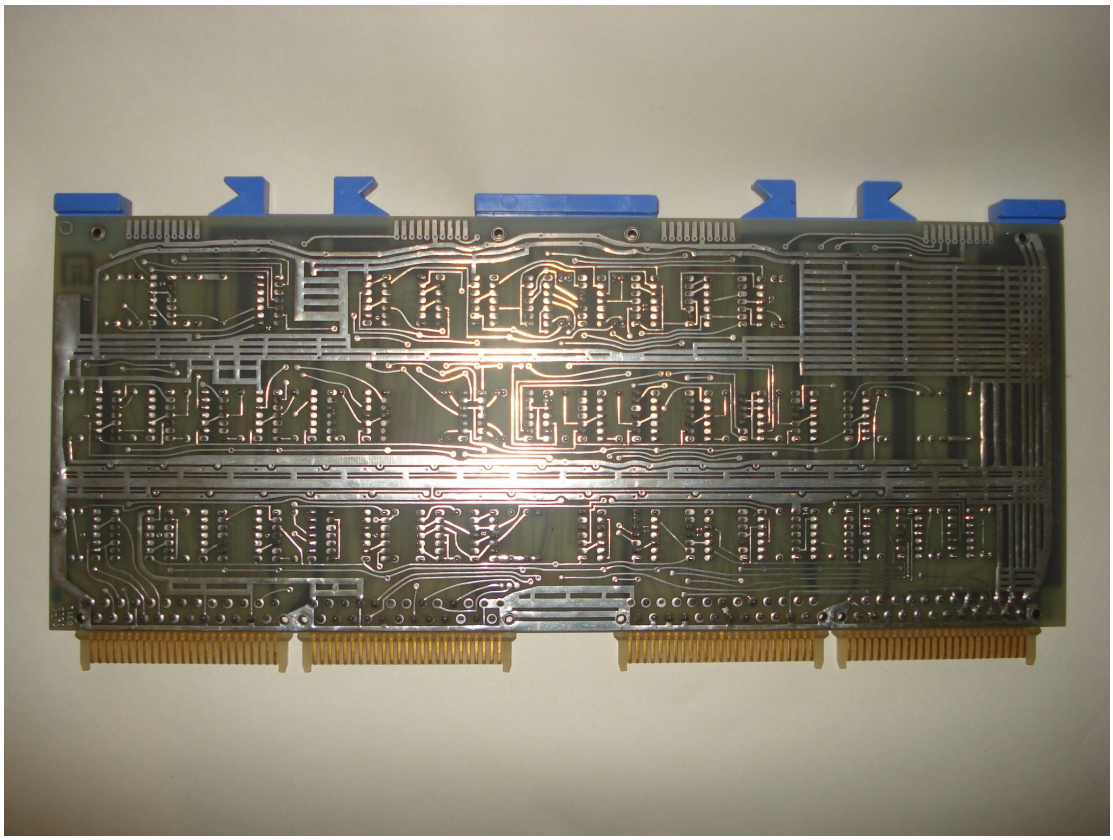




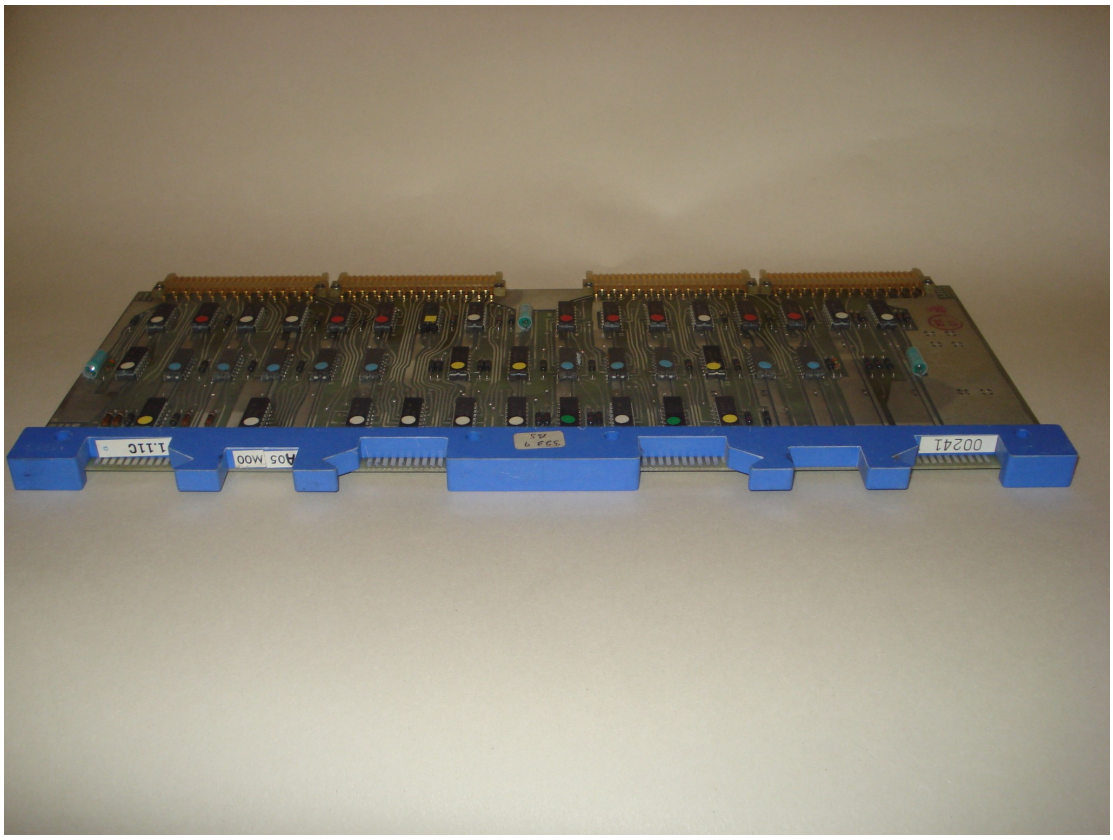
1.11B Register Board bits 12 & 13

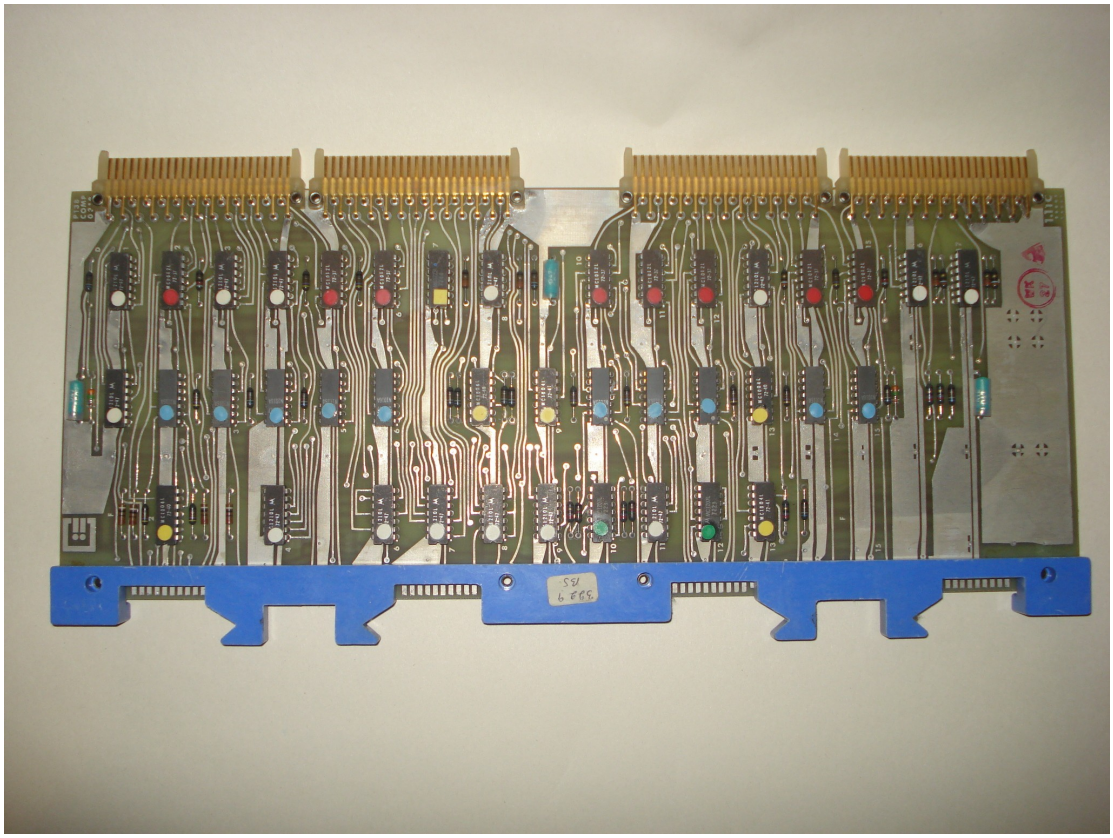


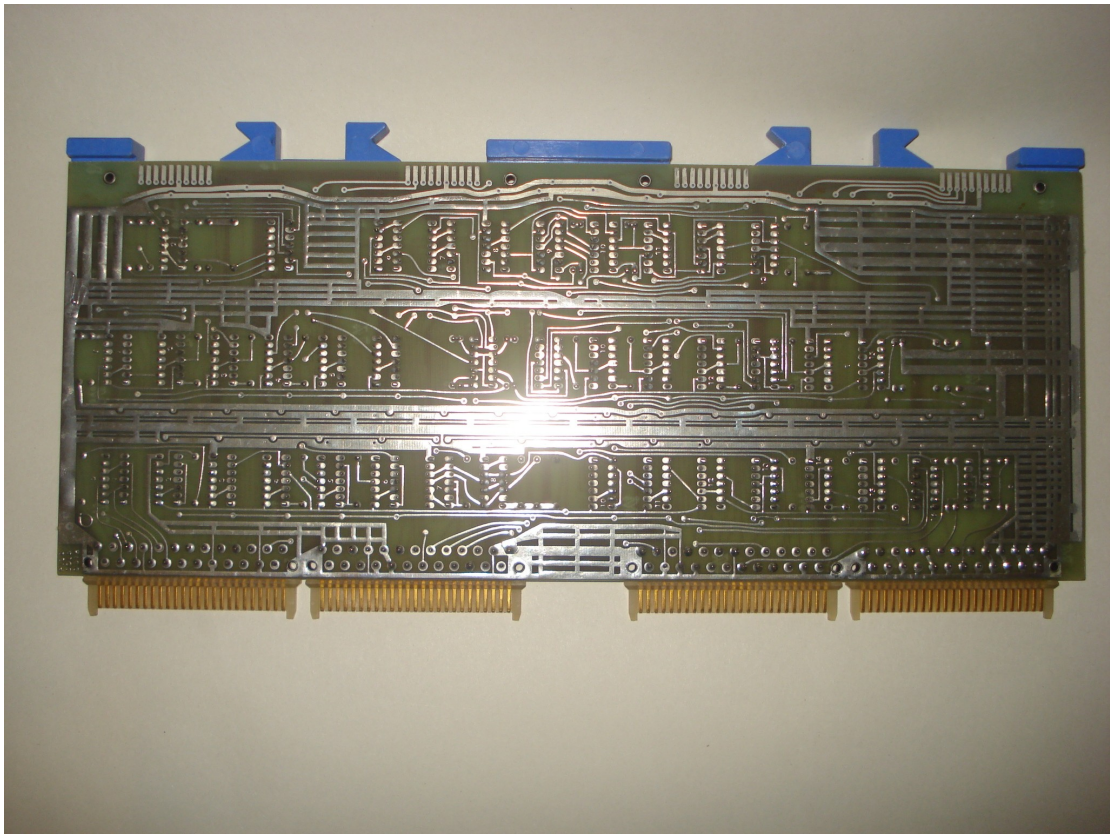




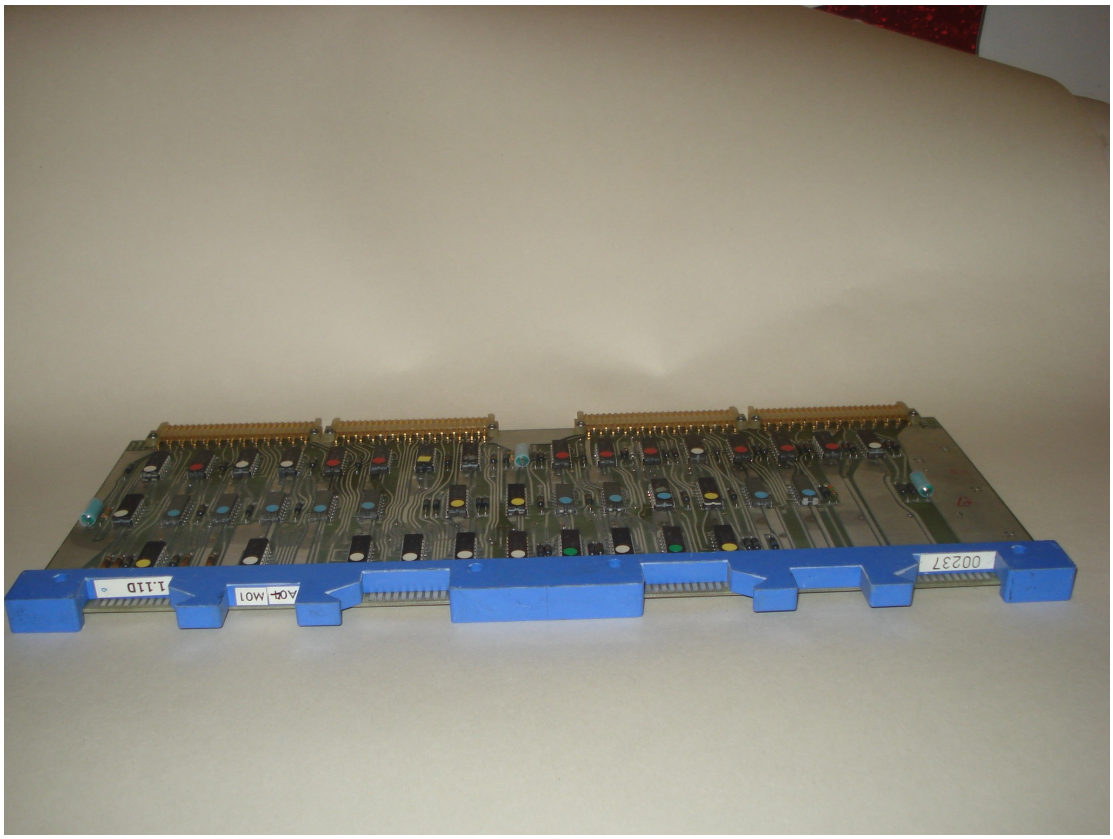
1.11C Register Board bits 10 & 11

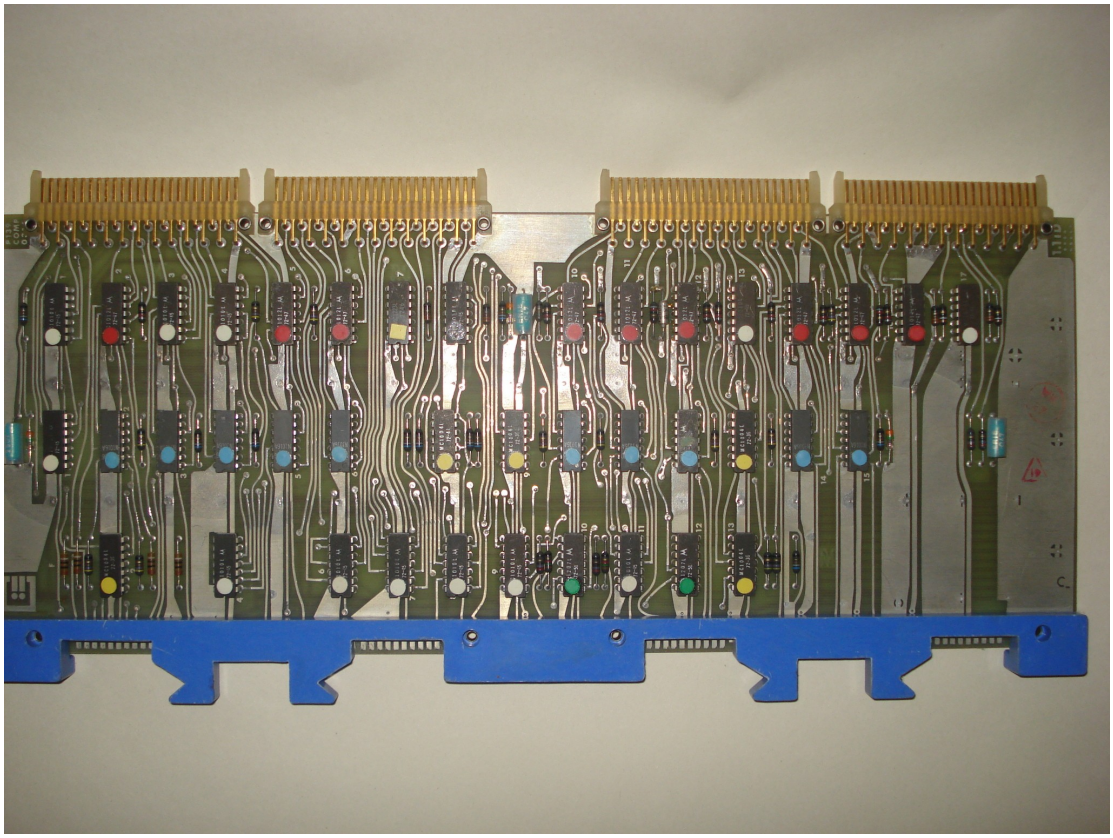


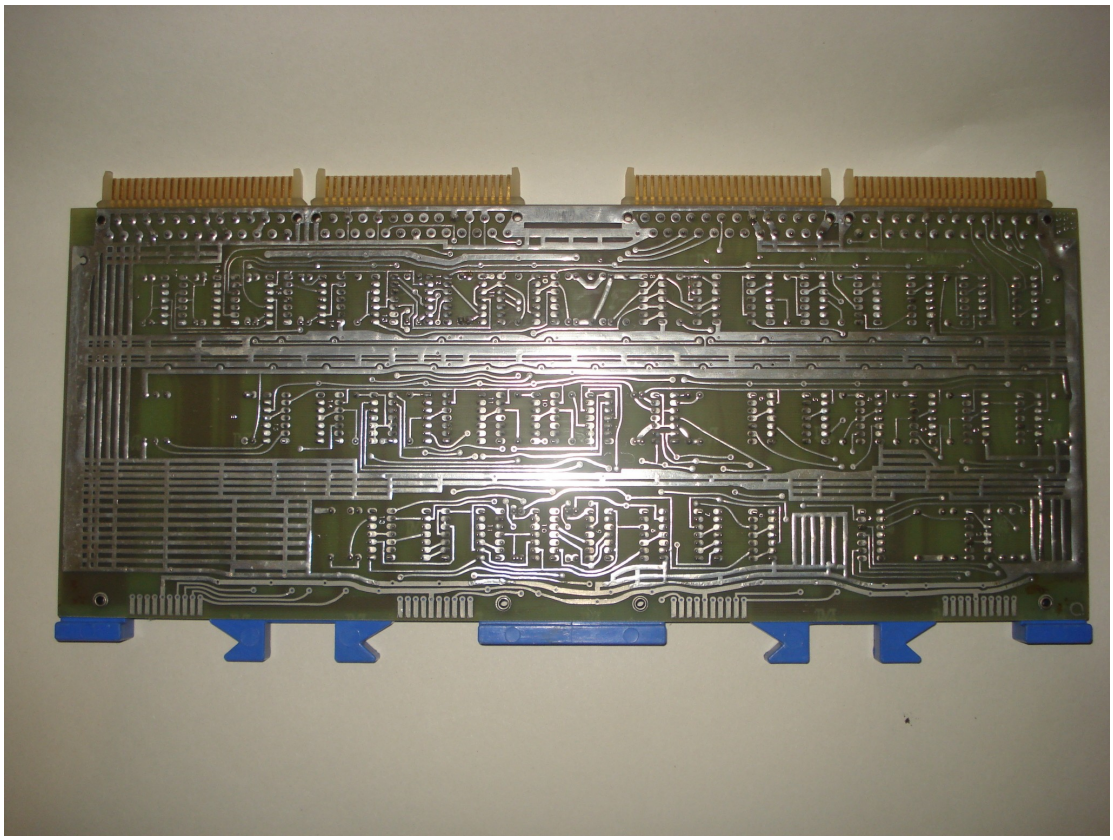




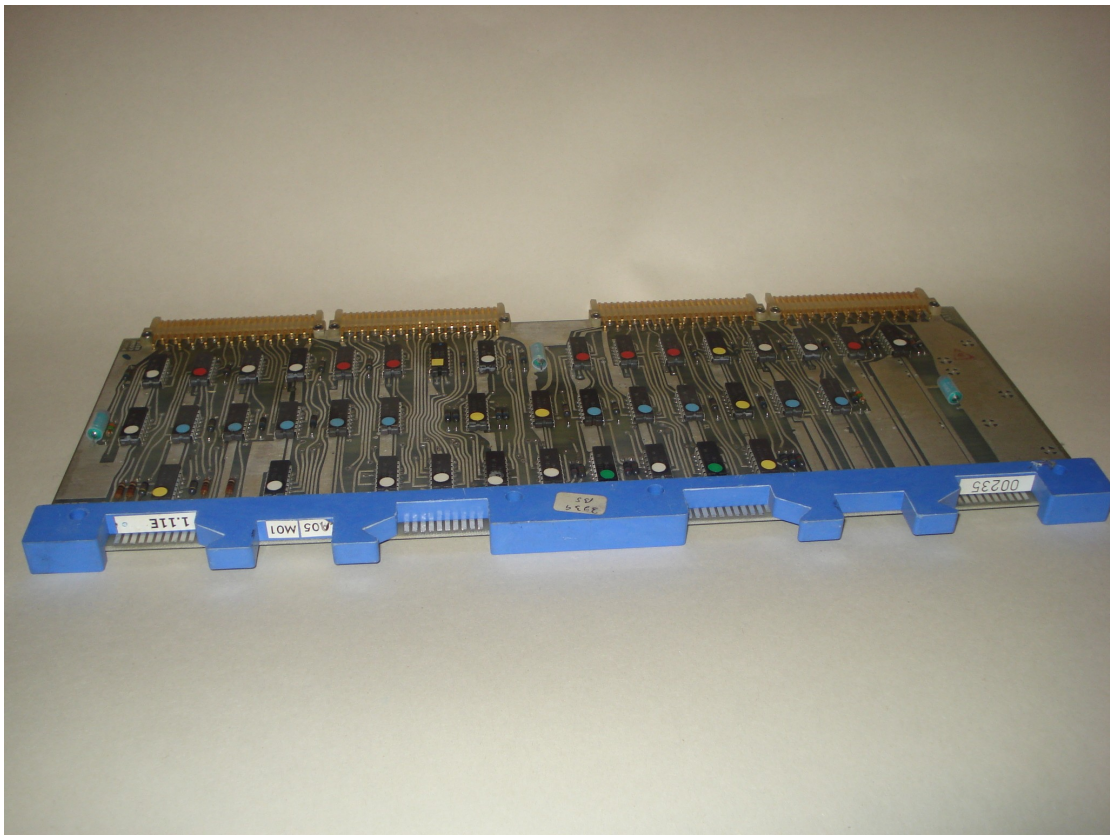
1.11D Register Board bits 8 & 9

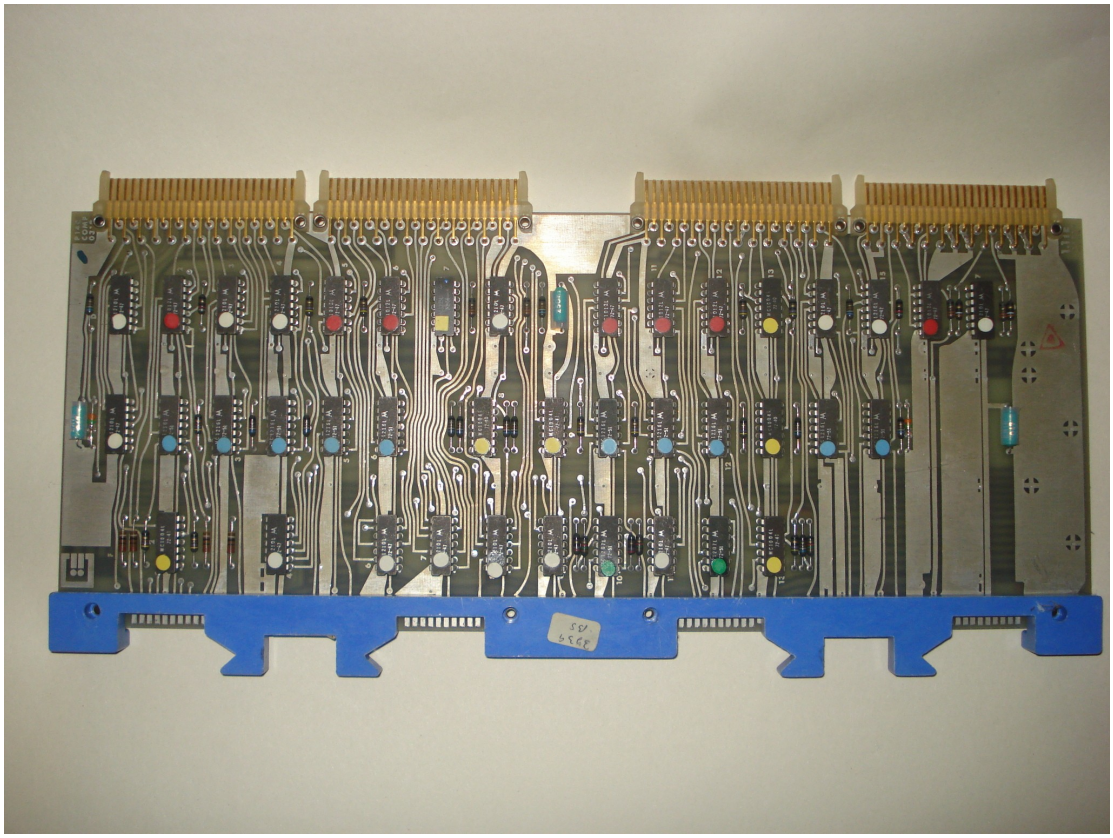


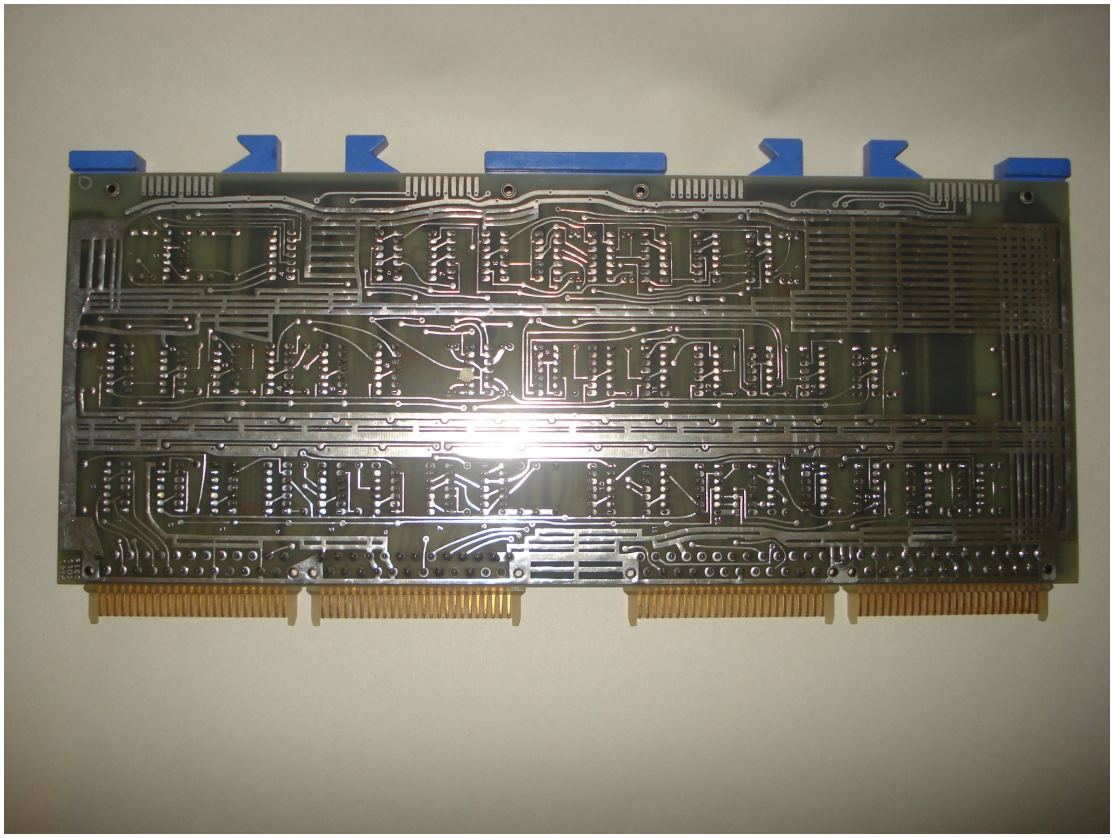




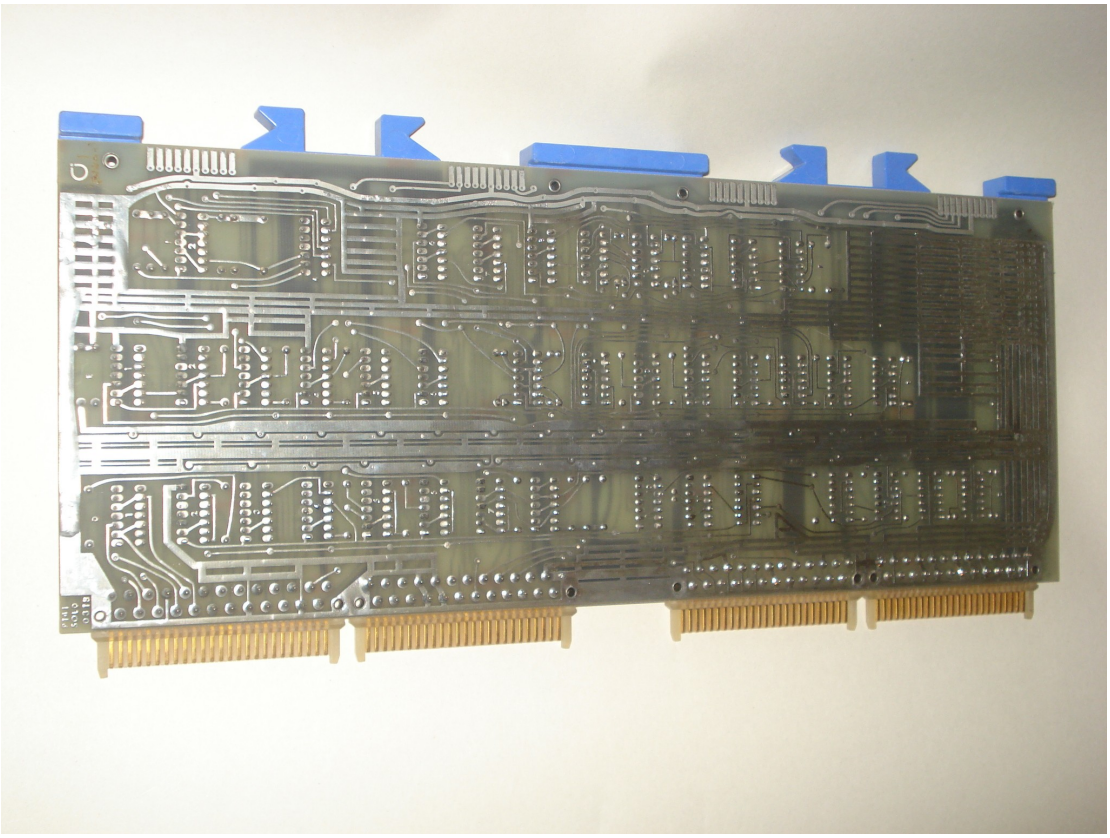
1.11E Register Board bits 6 & 7

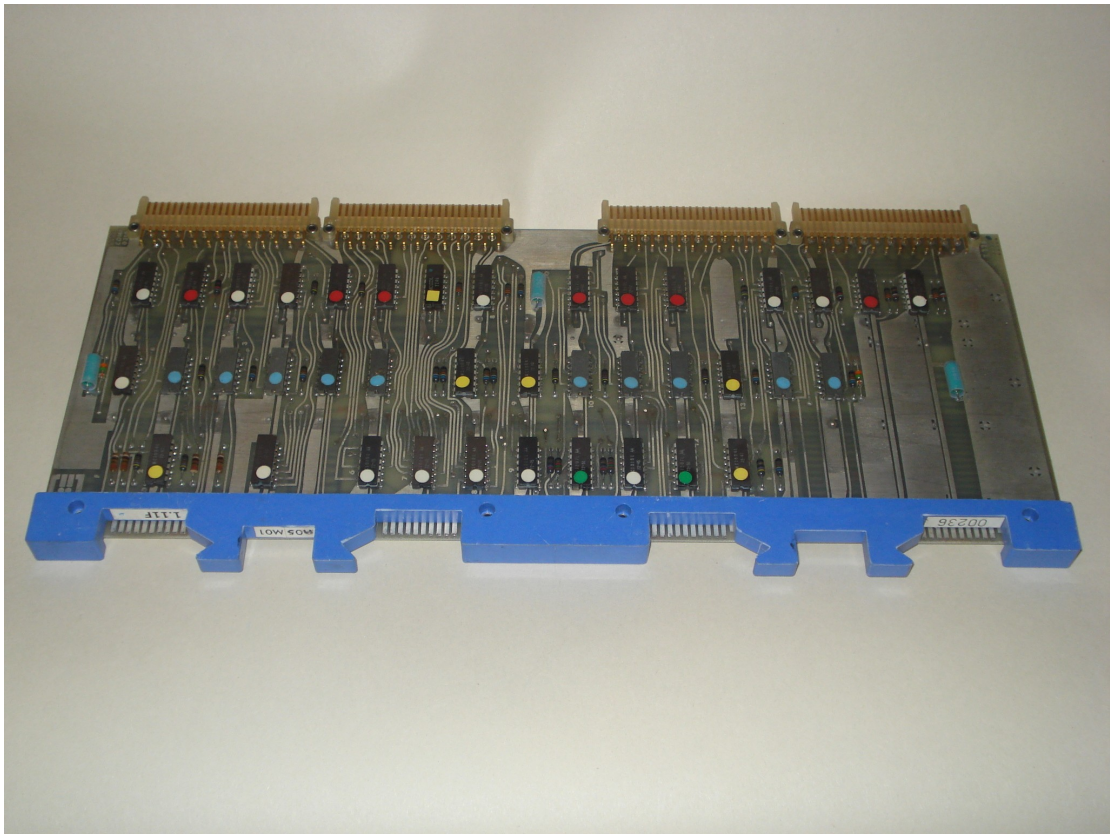


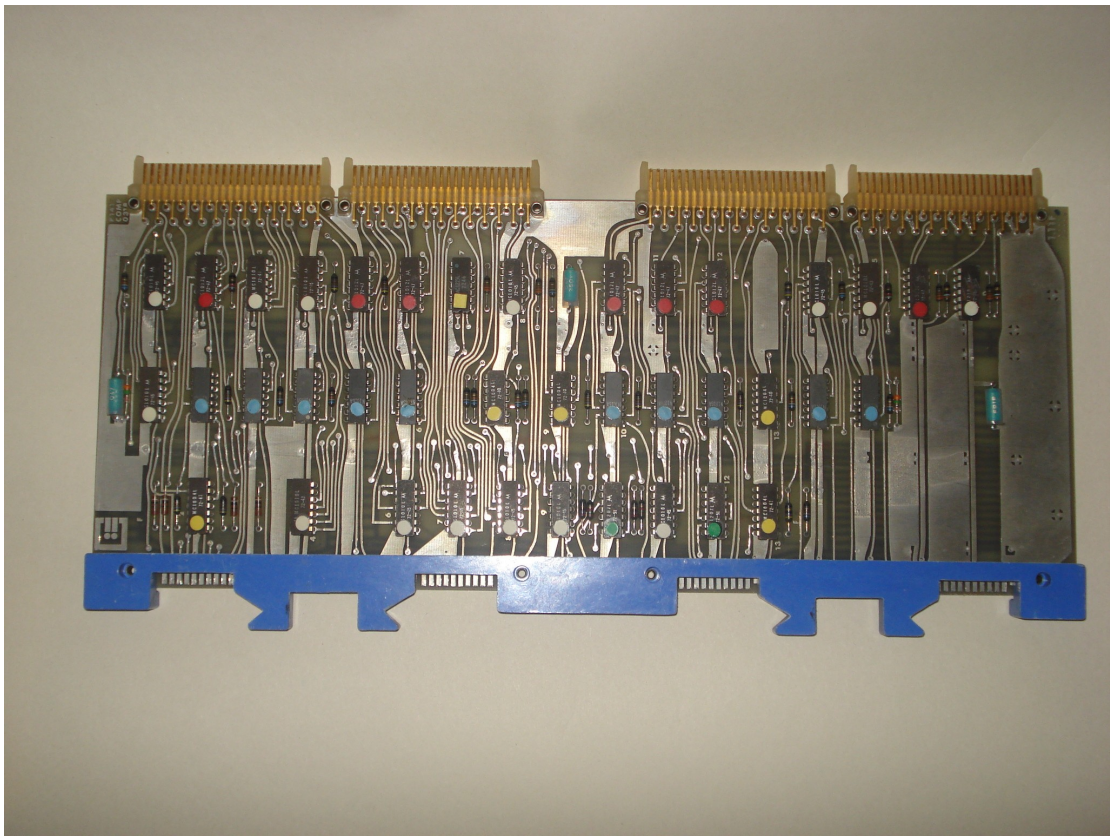




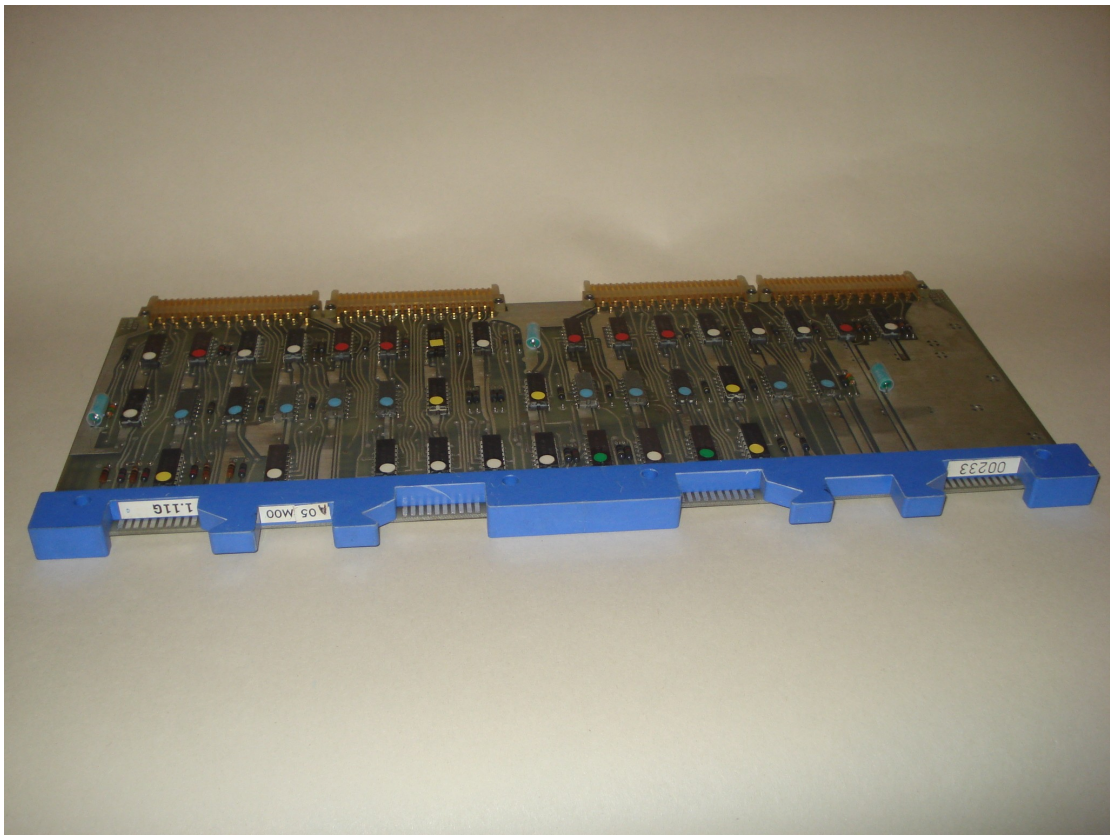
1.11F Register Board bits 4 & 5

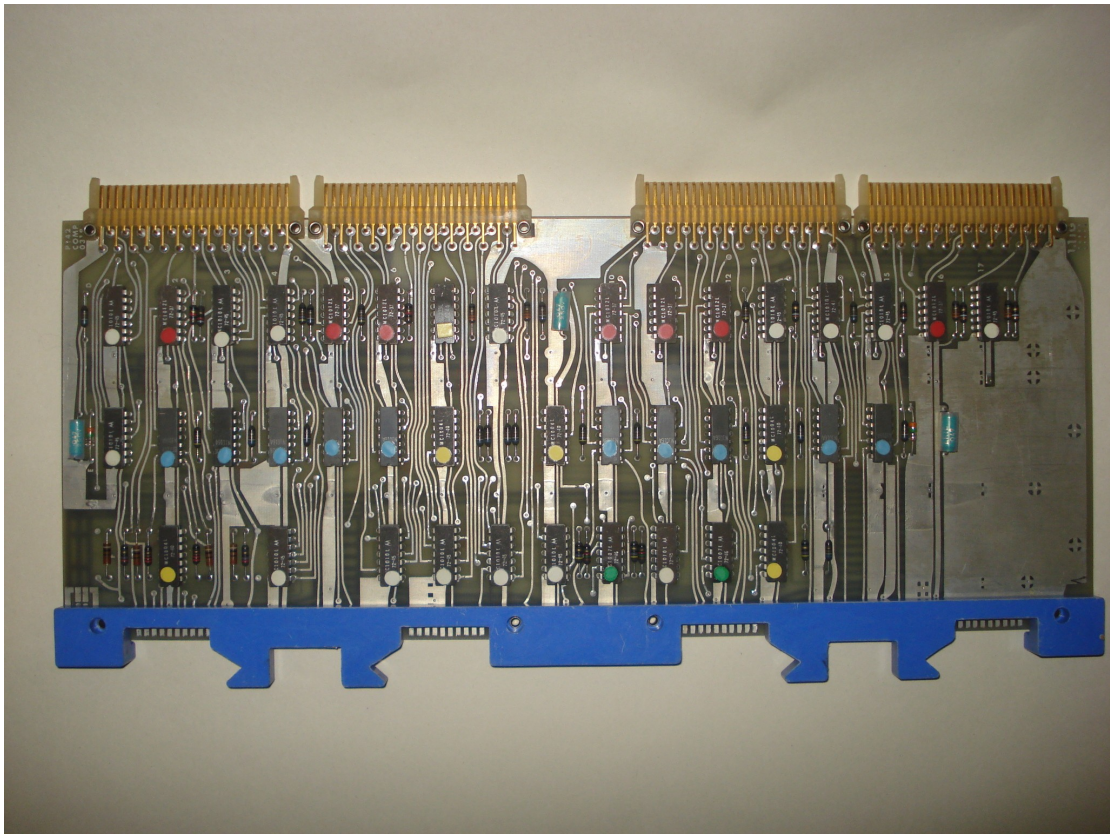


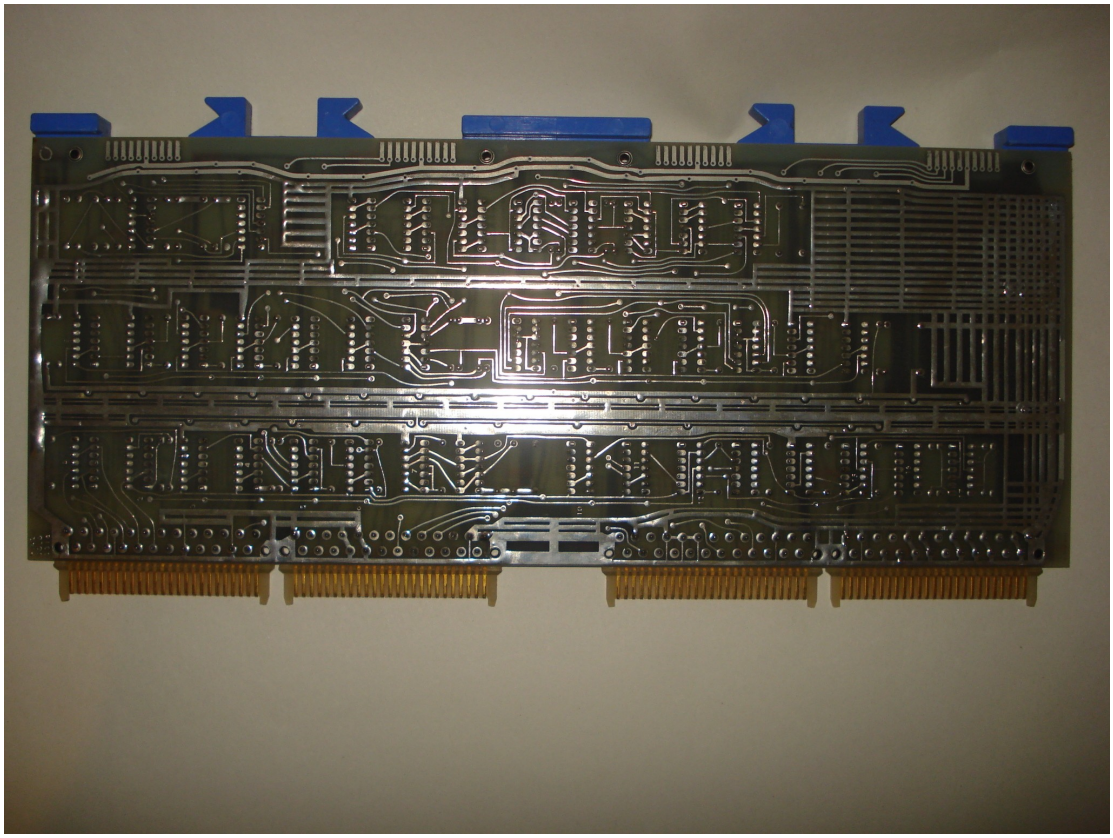




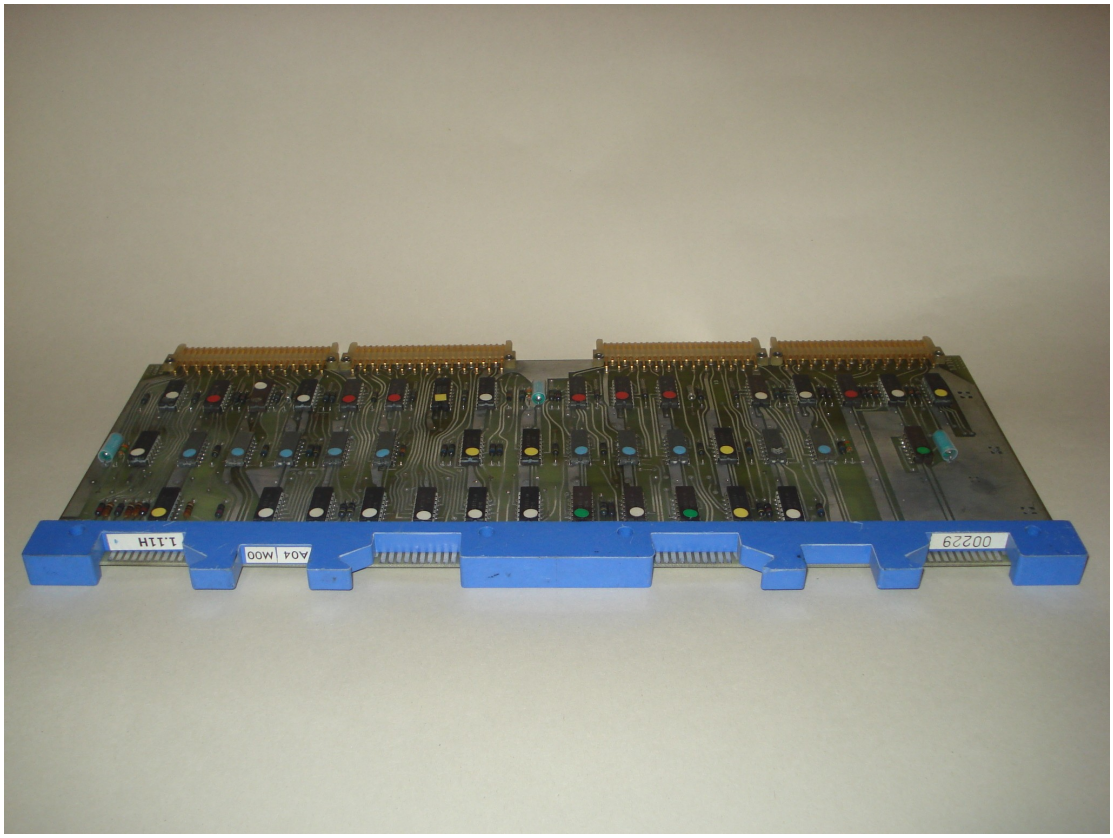
1.11G Register Board bits 2 & 3

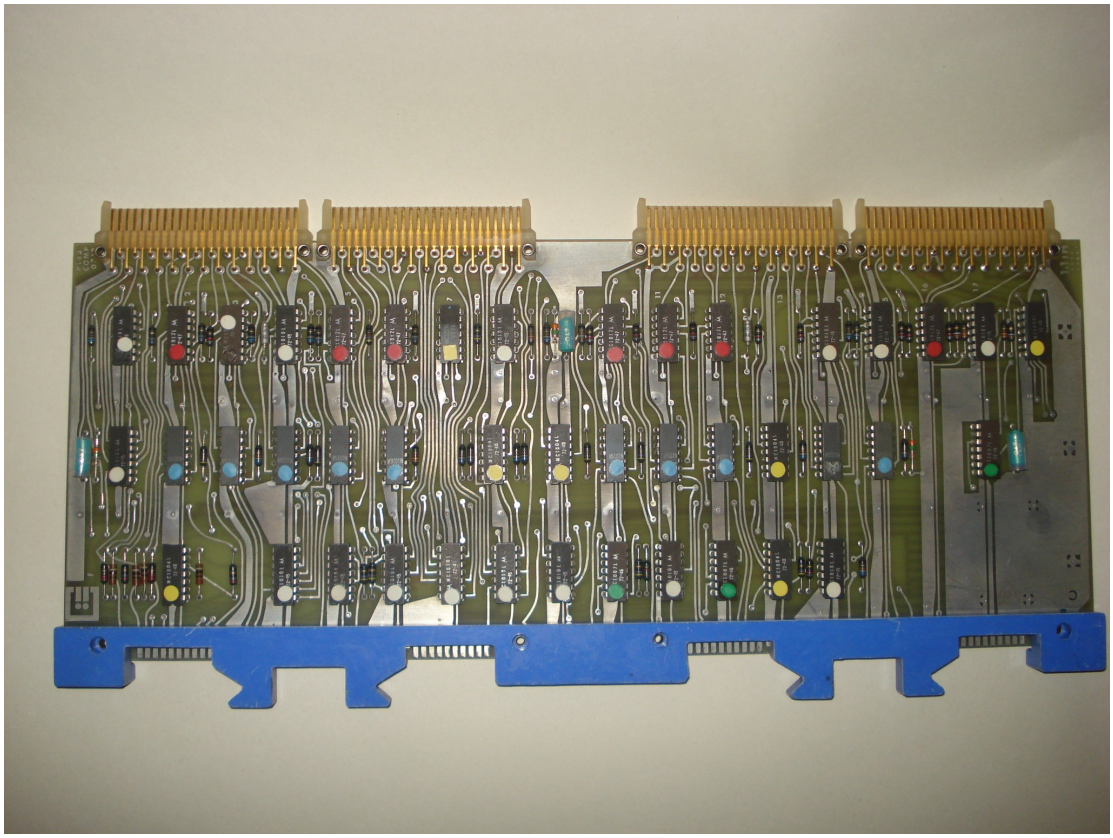


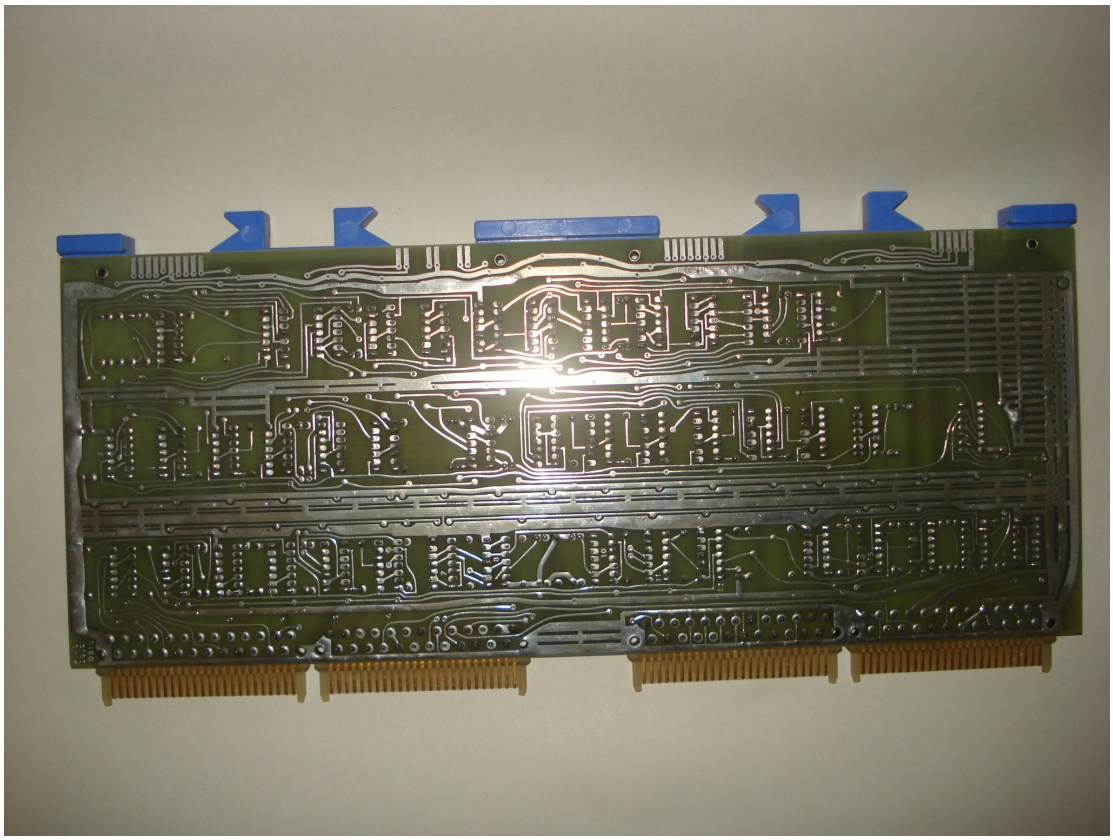




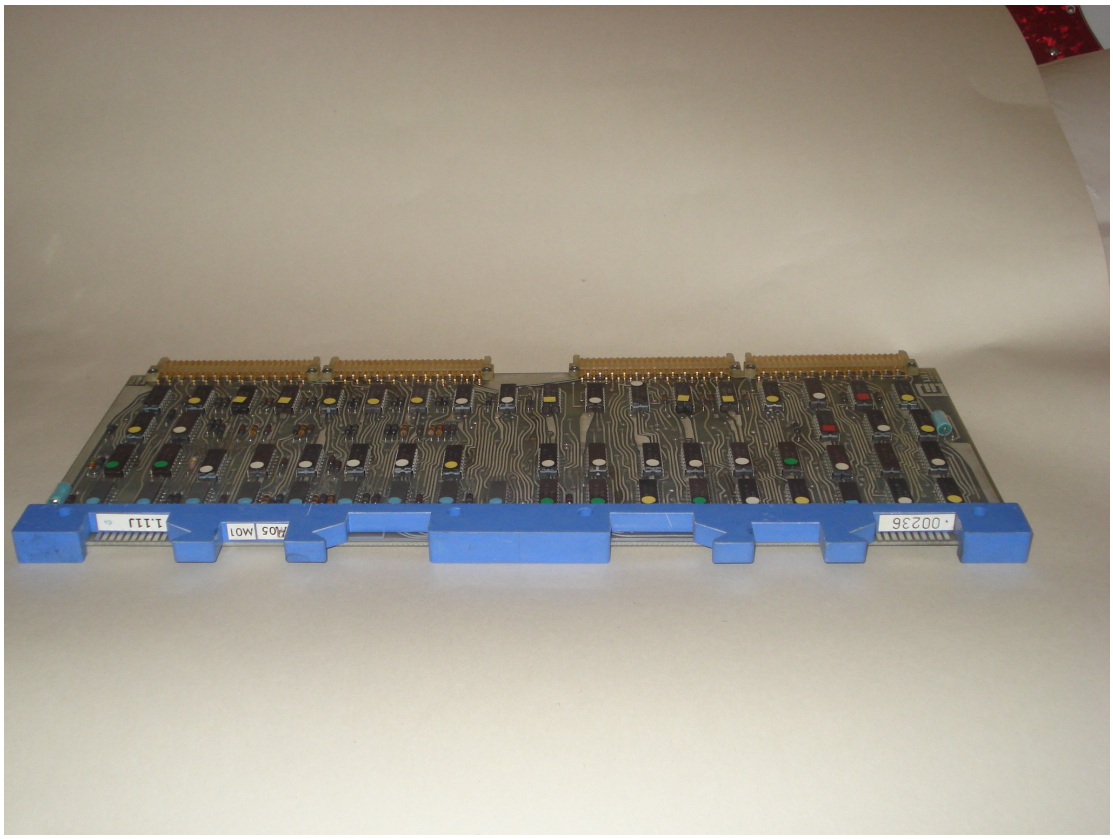
1.11H Register Board bits 0 & 1

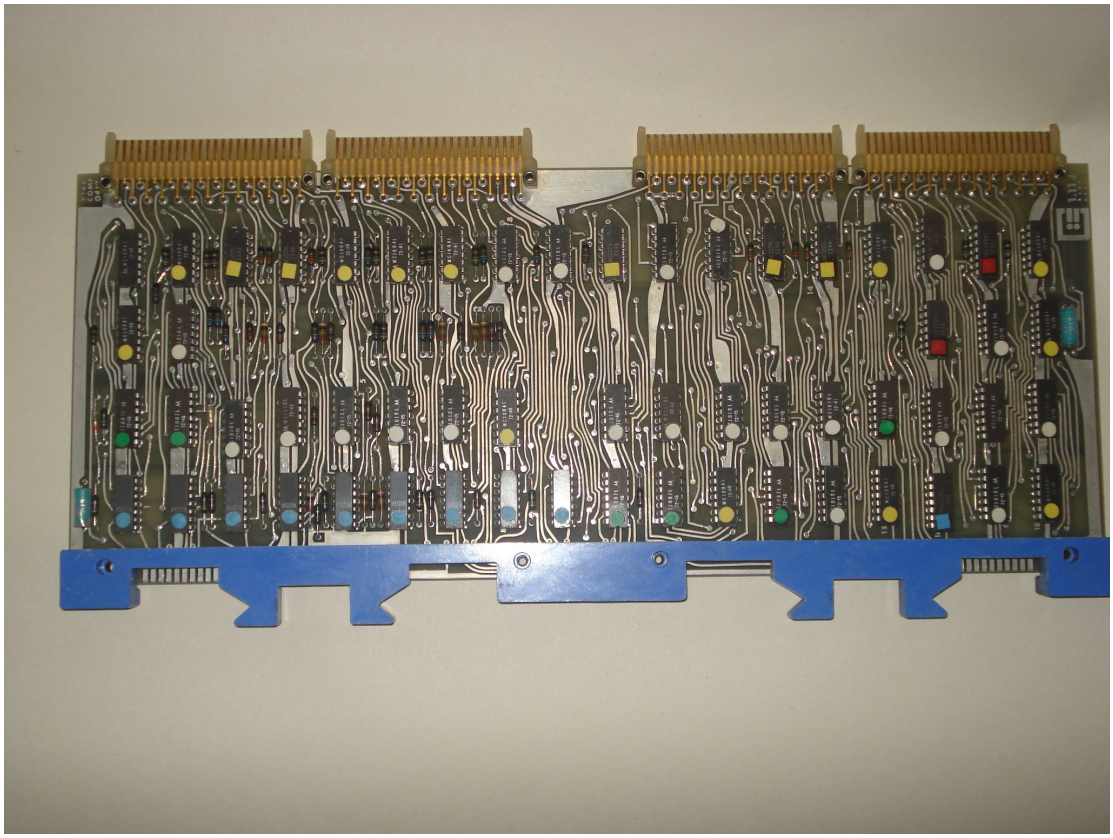


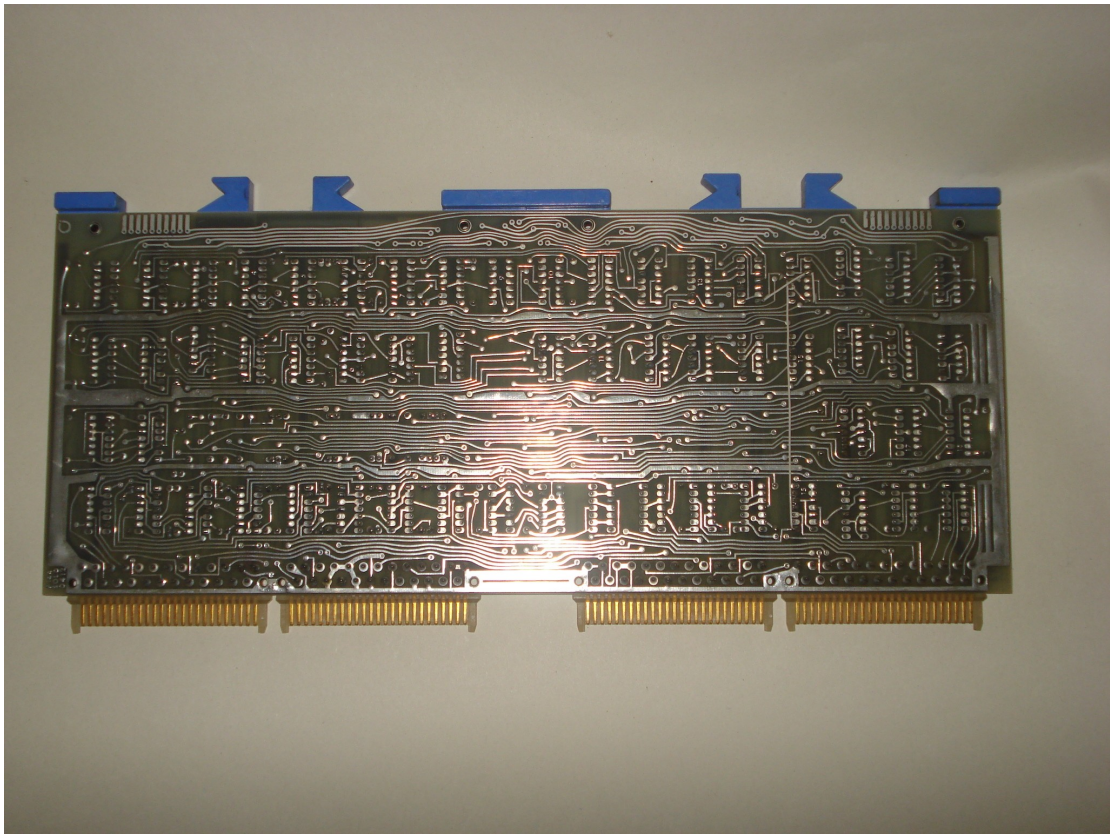




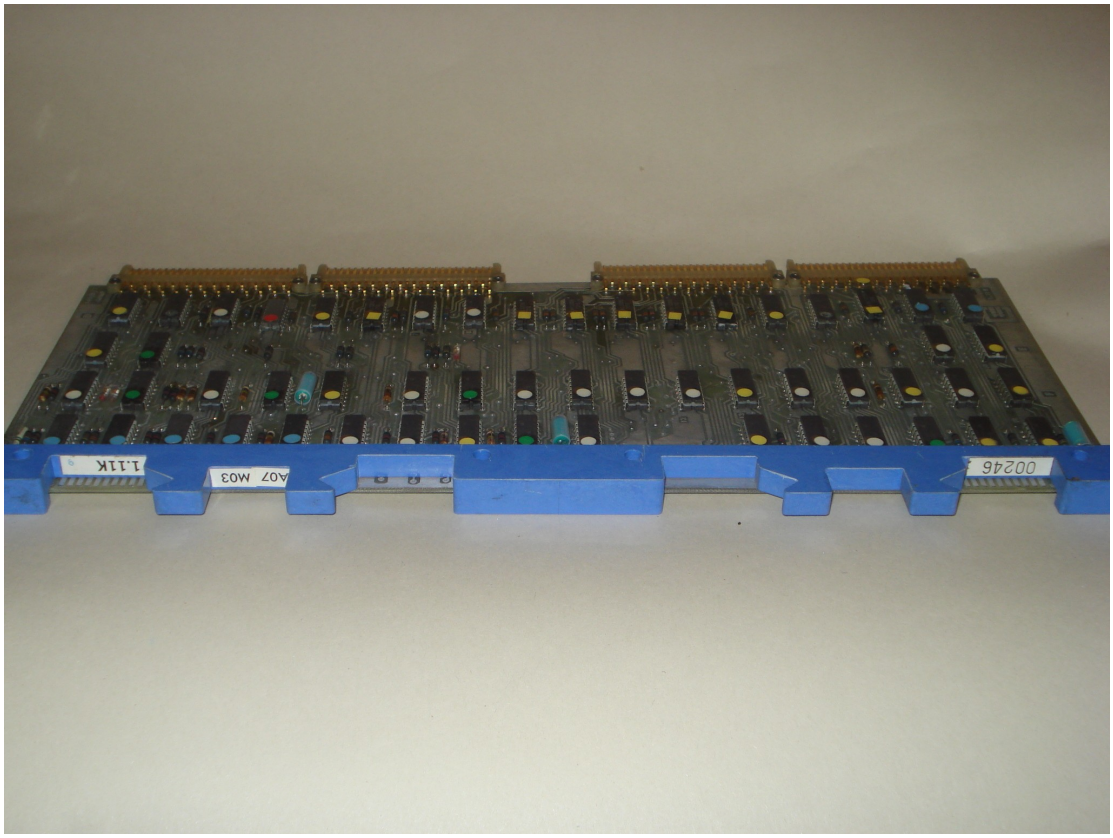
1.11J Control Board, Complex Arithmetic

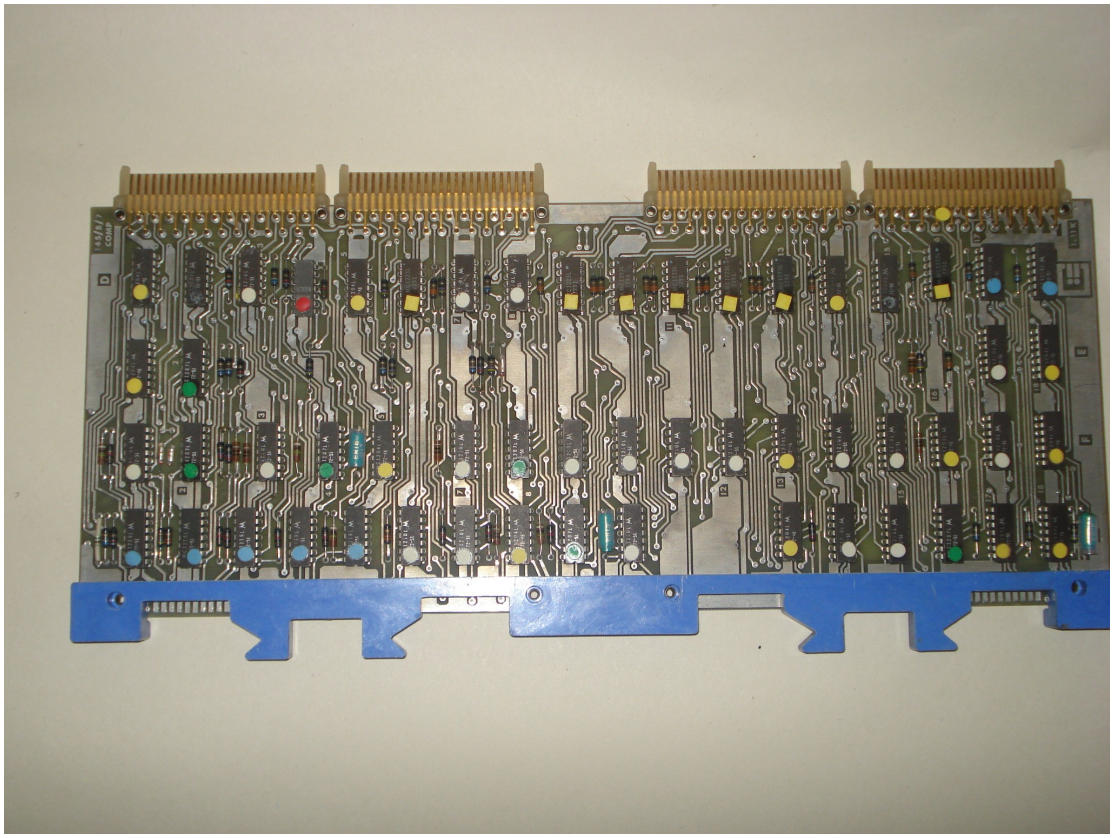


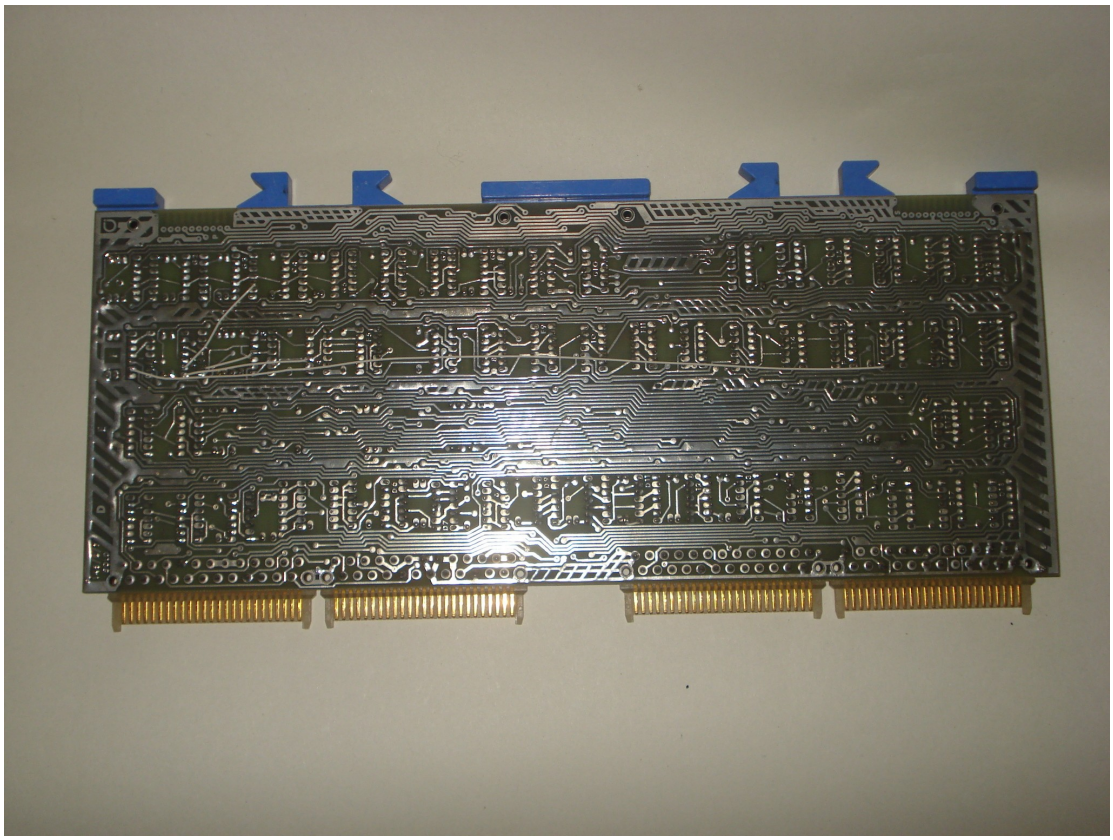




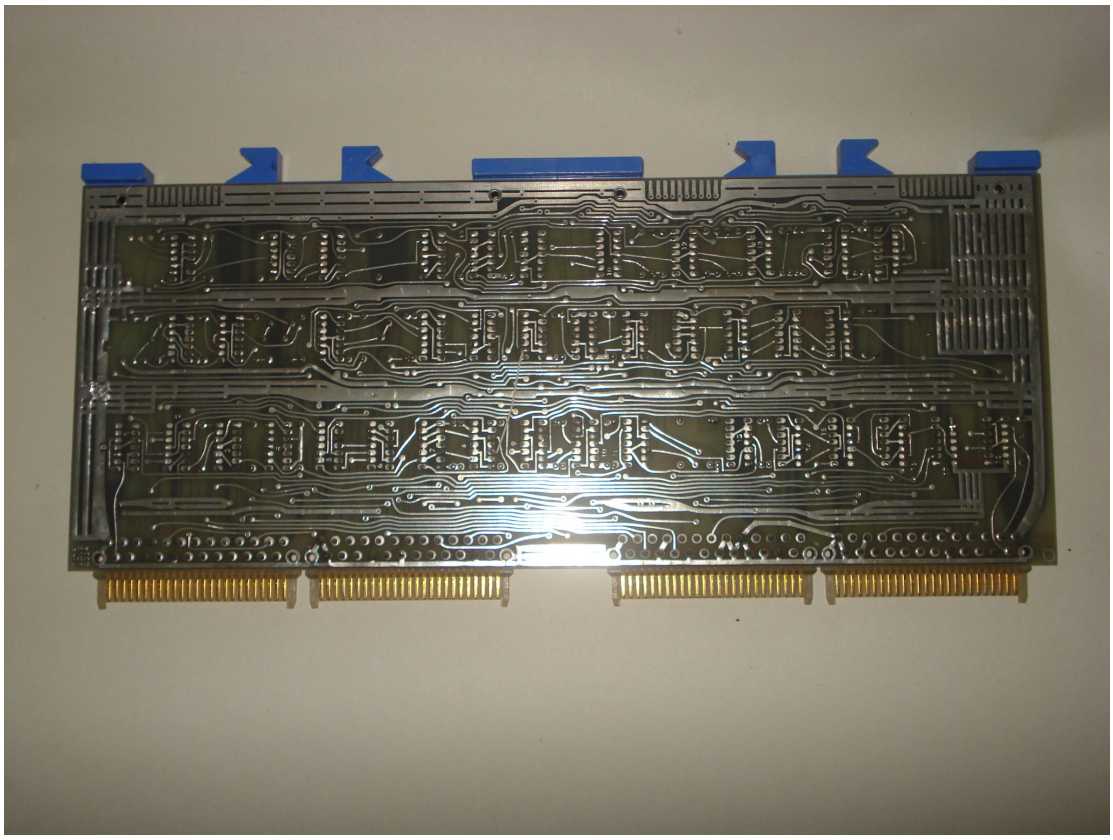
1.11K Control Board, Instruction

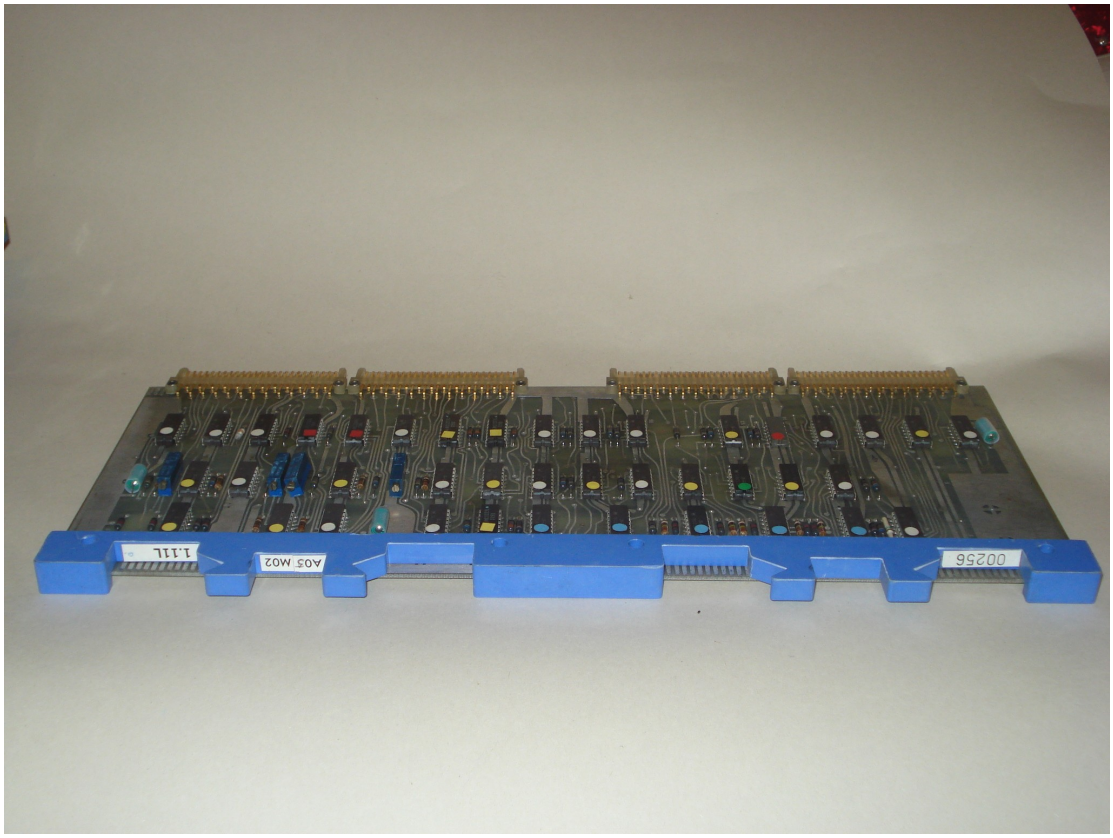


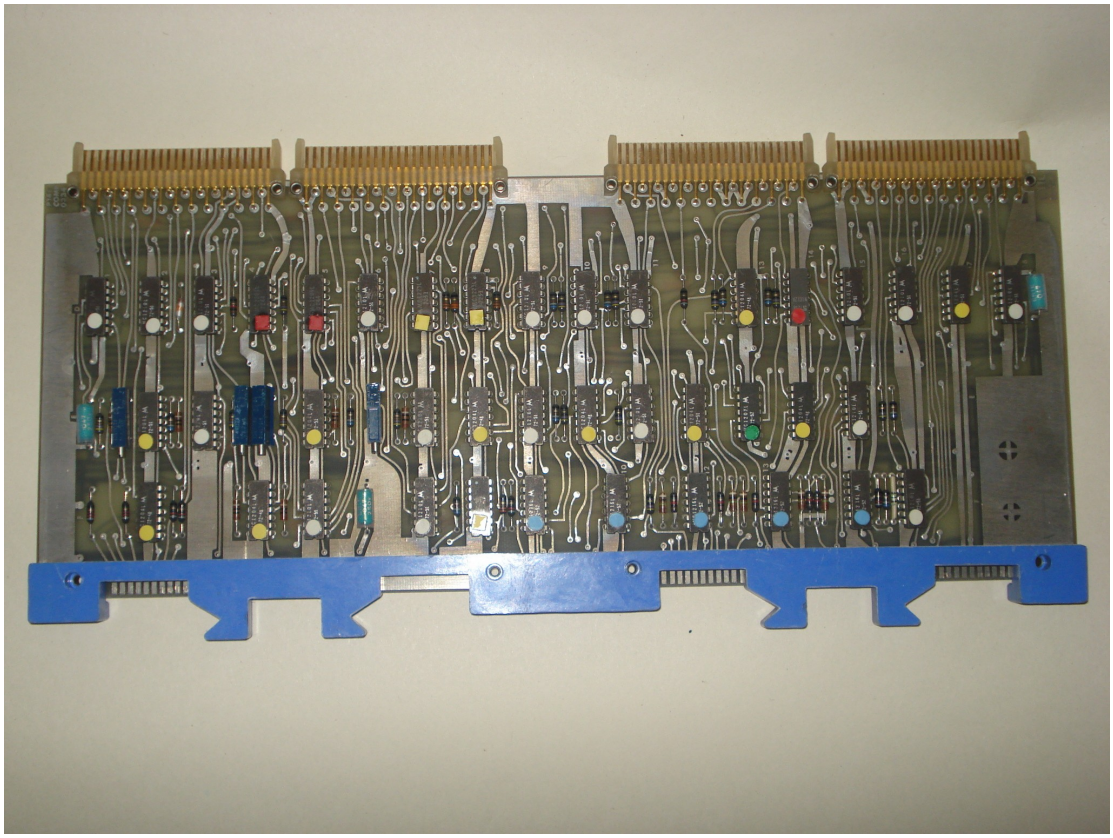




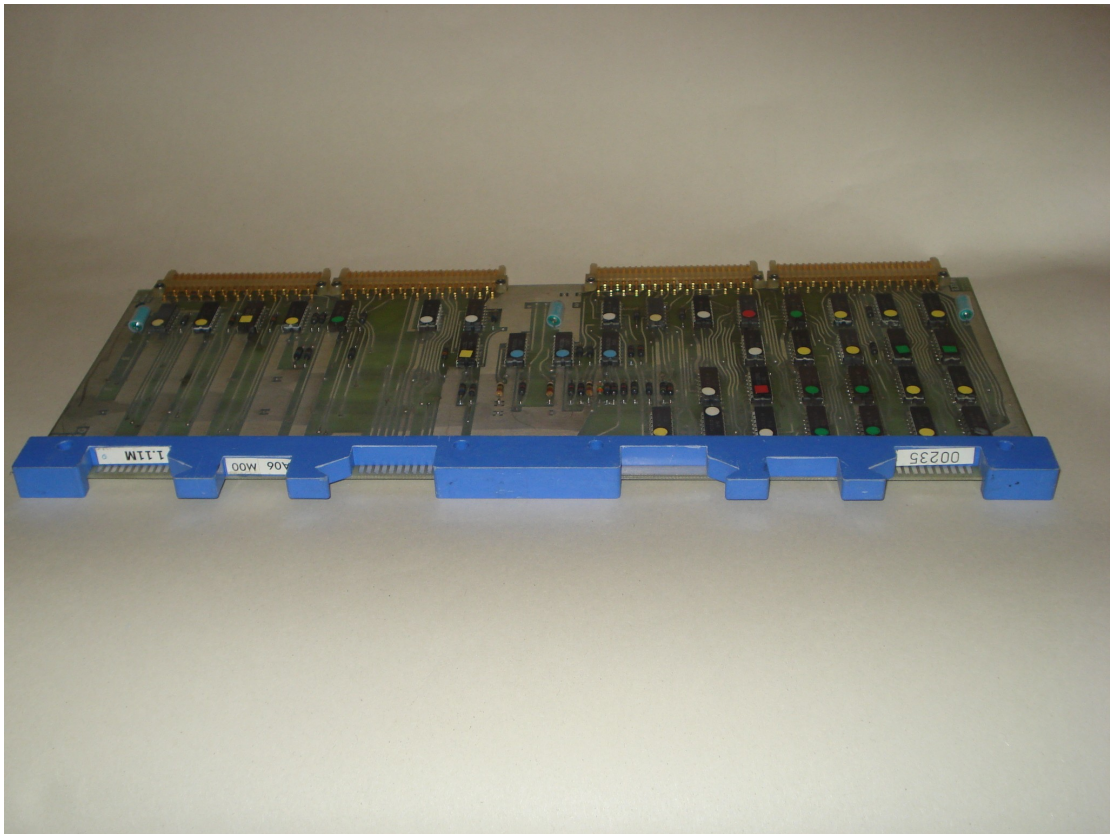
1.11L Control Board, Clock

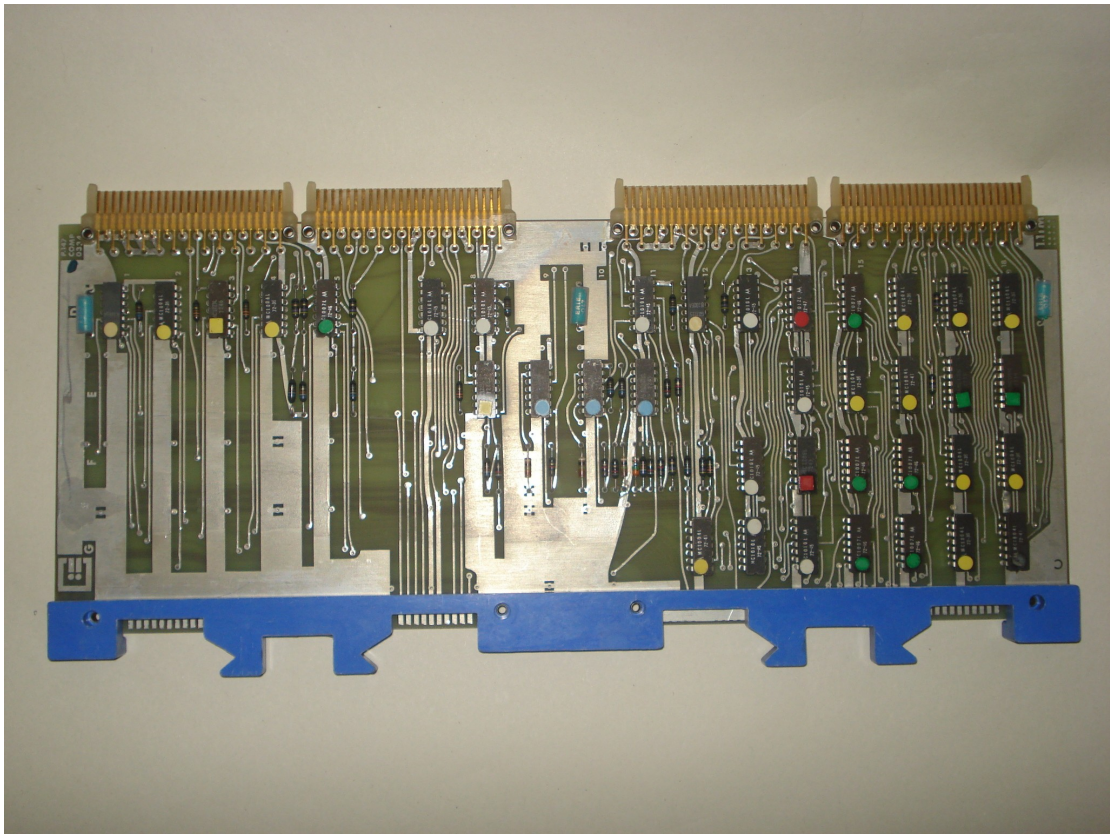


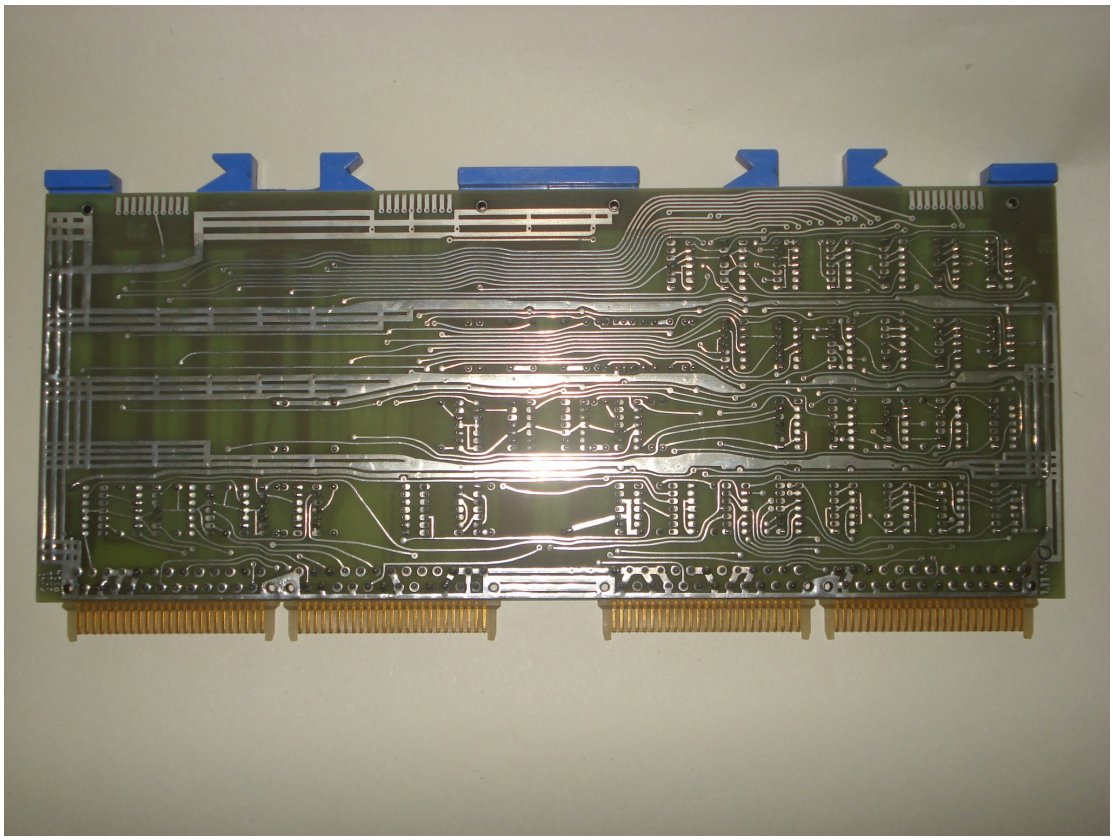




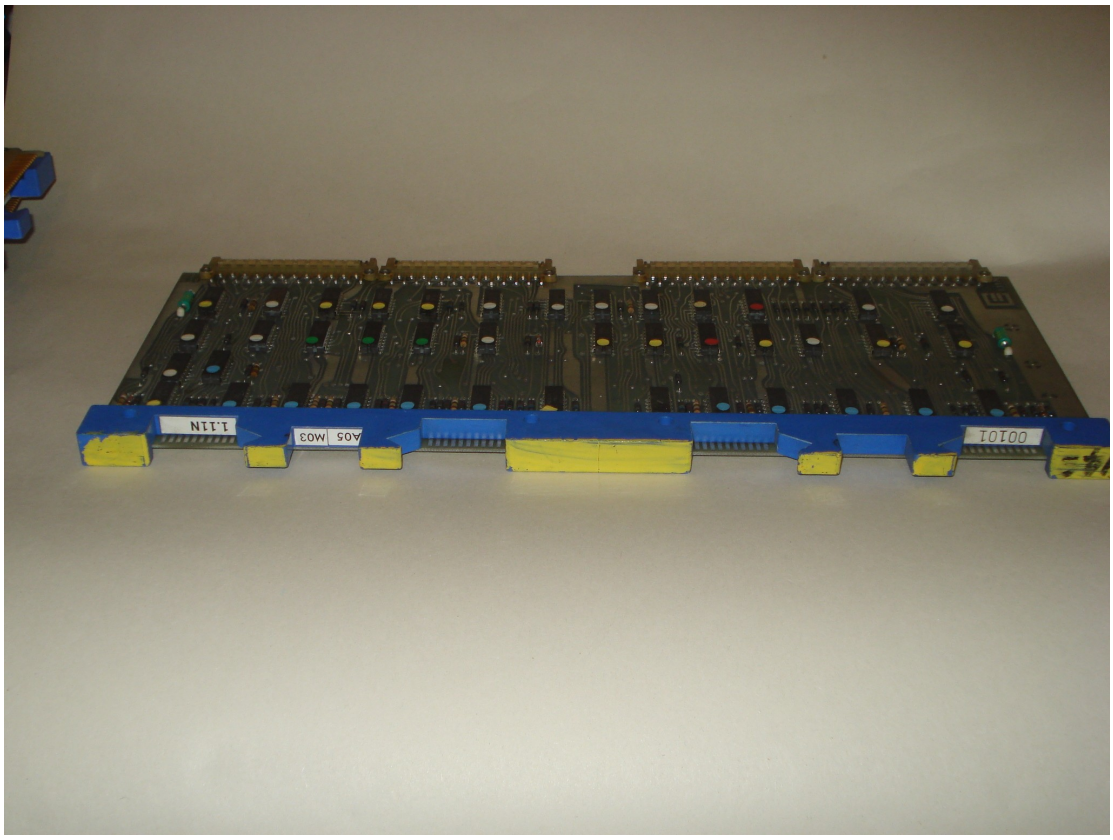
1.11M Control Board, Register Operation

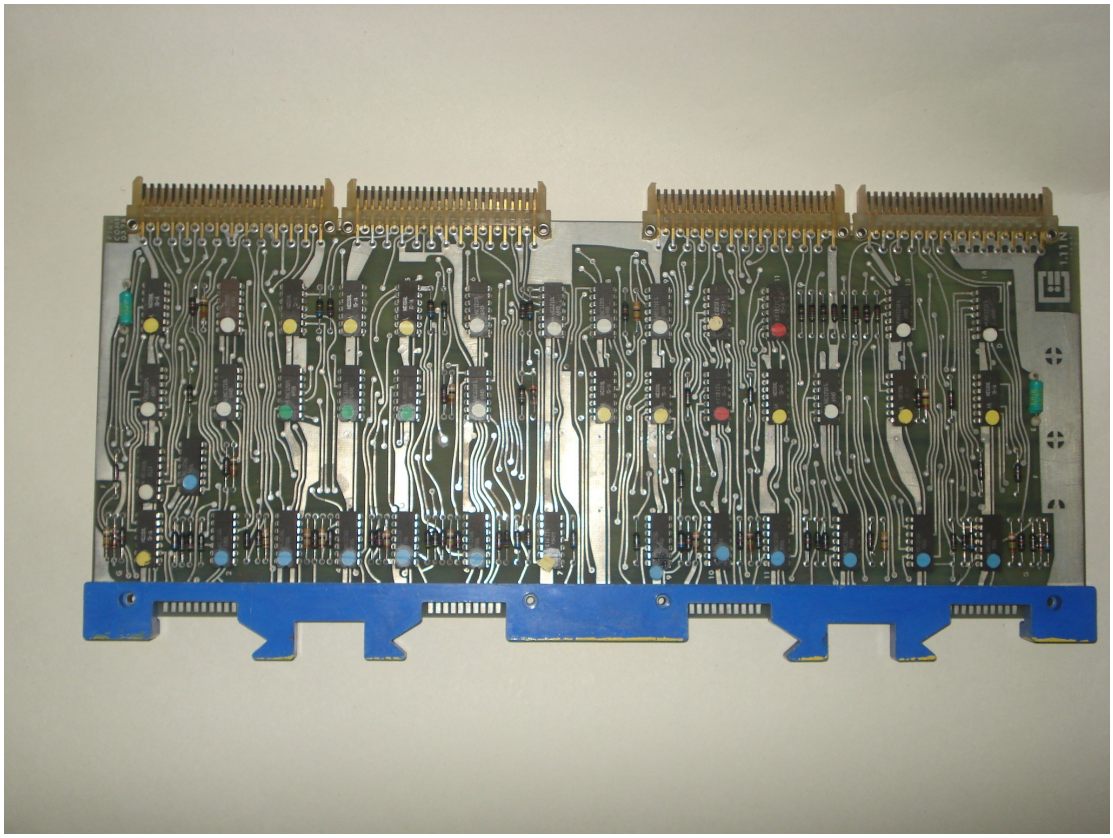


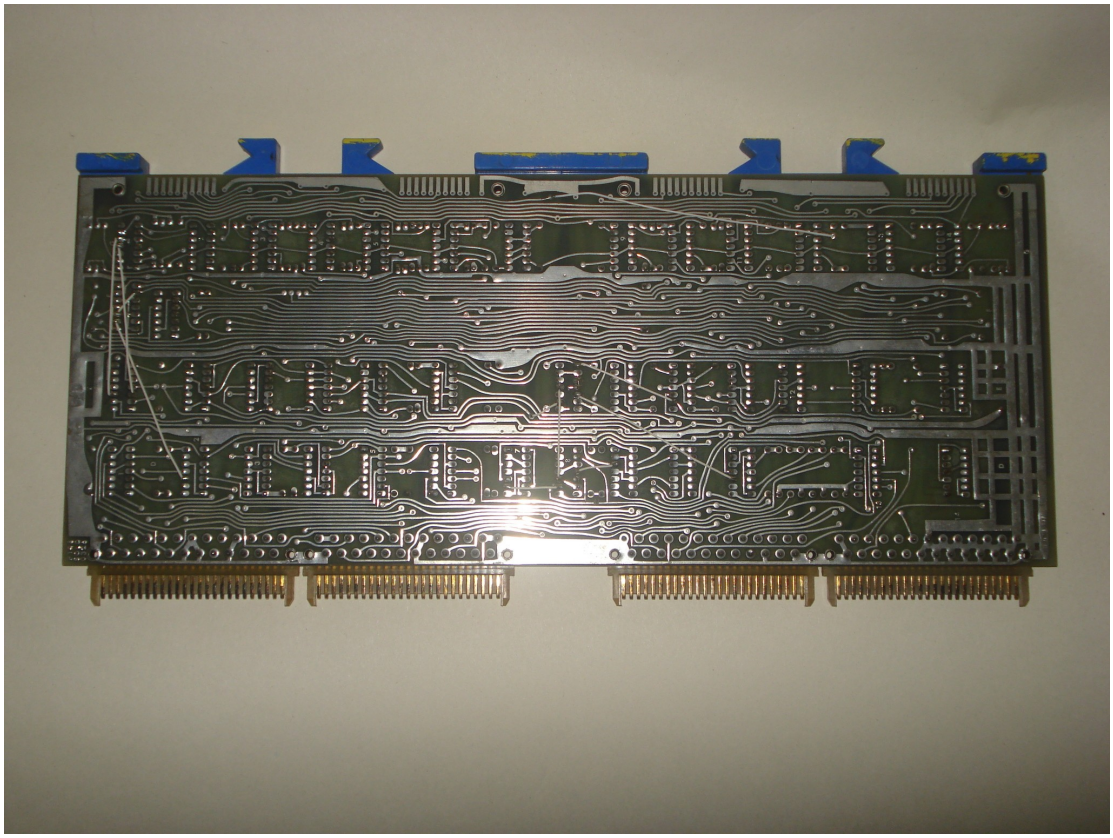




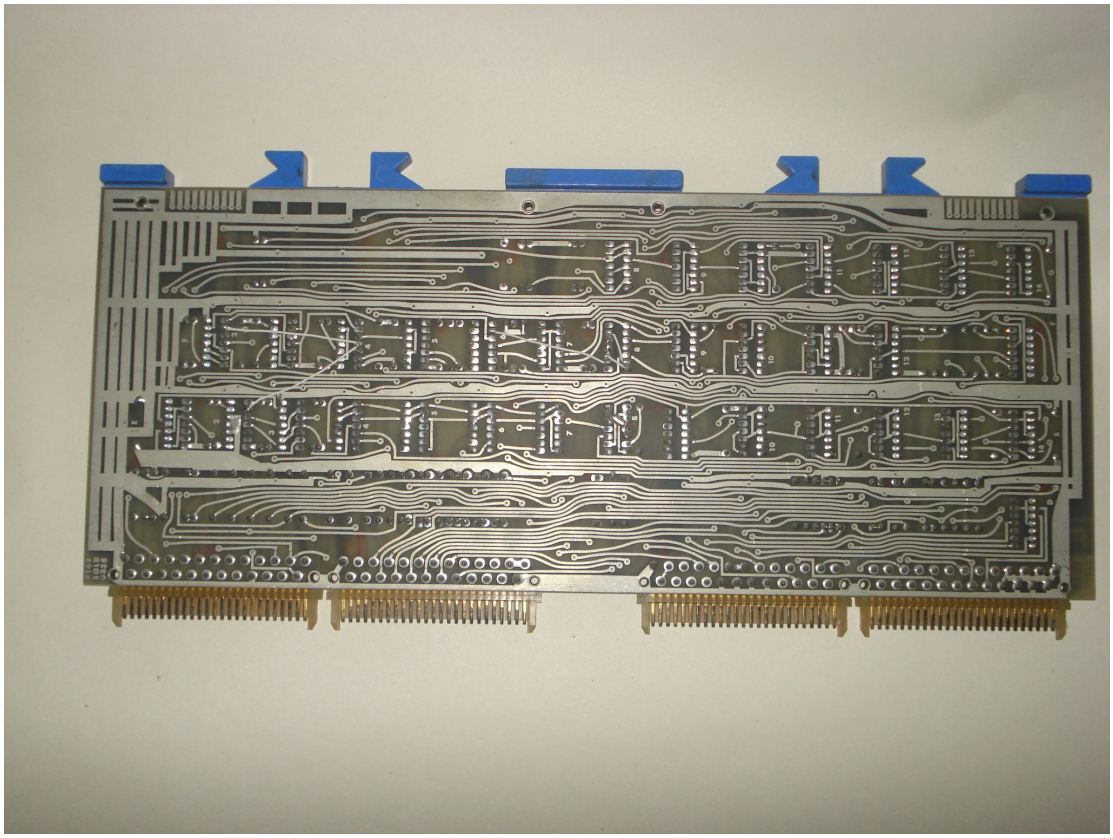
1.11N Control Board, Simple Arithmetic

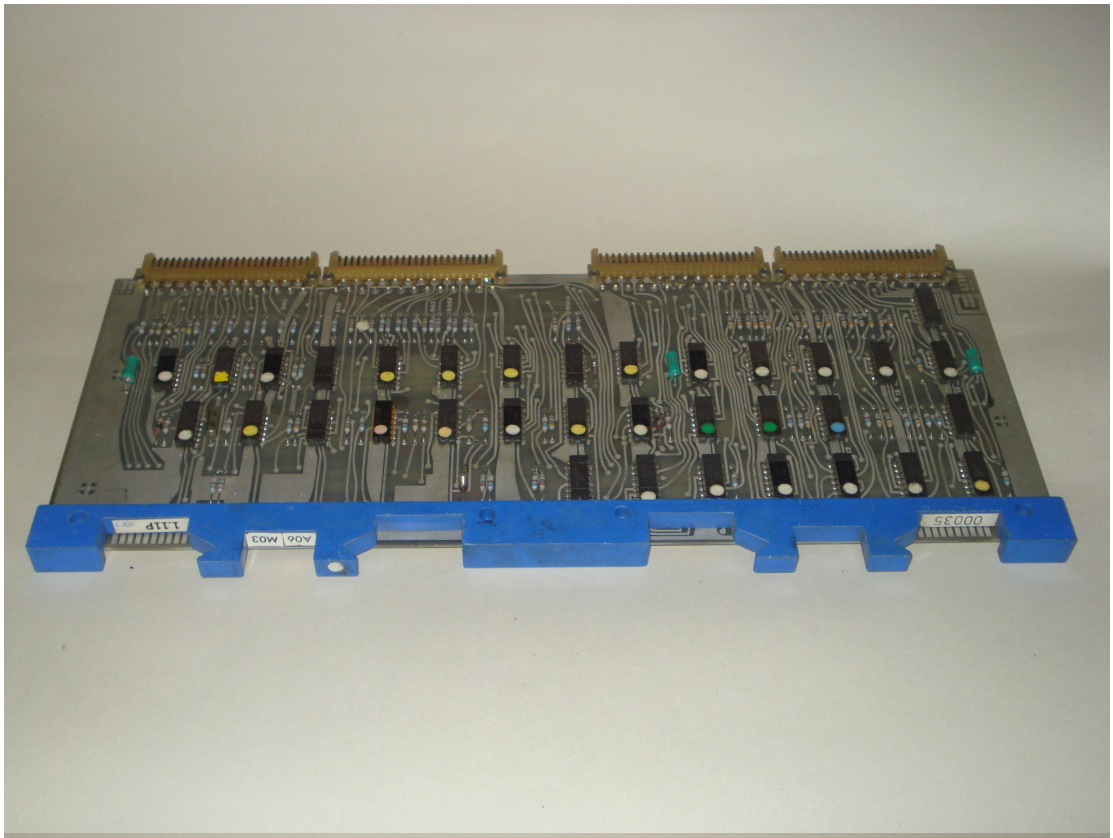


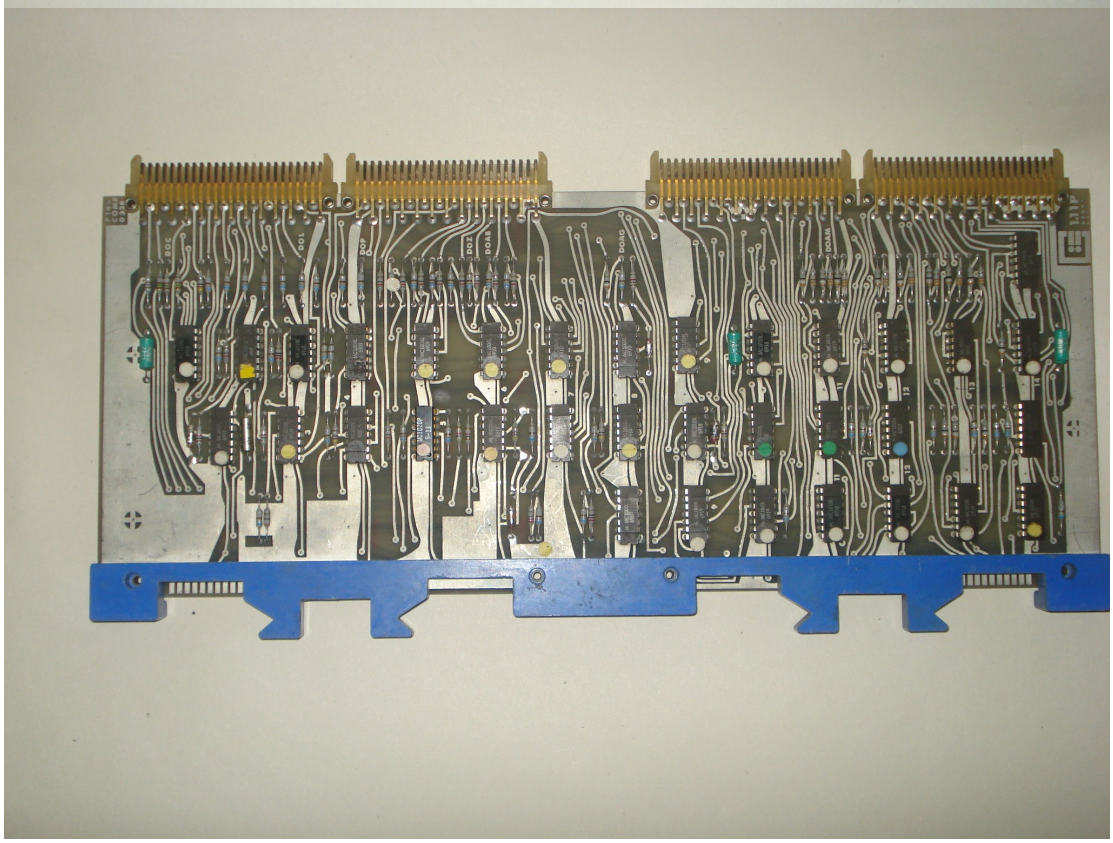




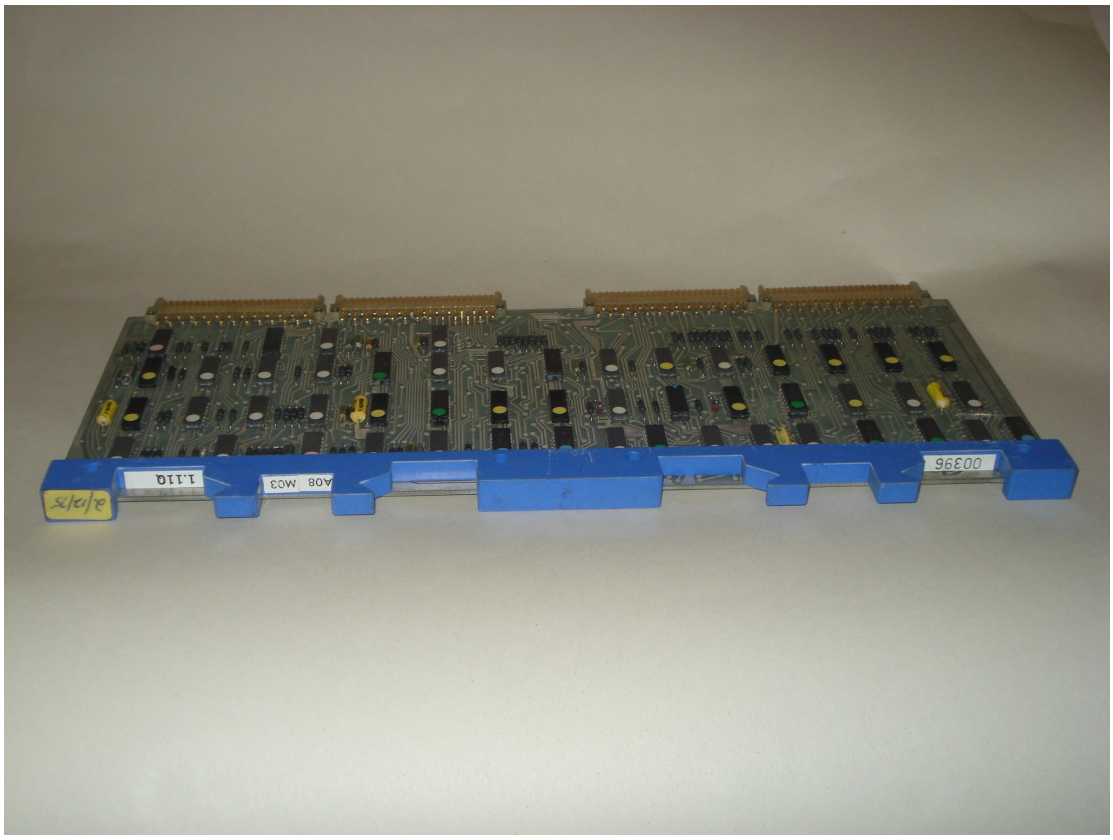
1.11P Multiplexer Board

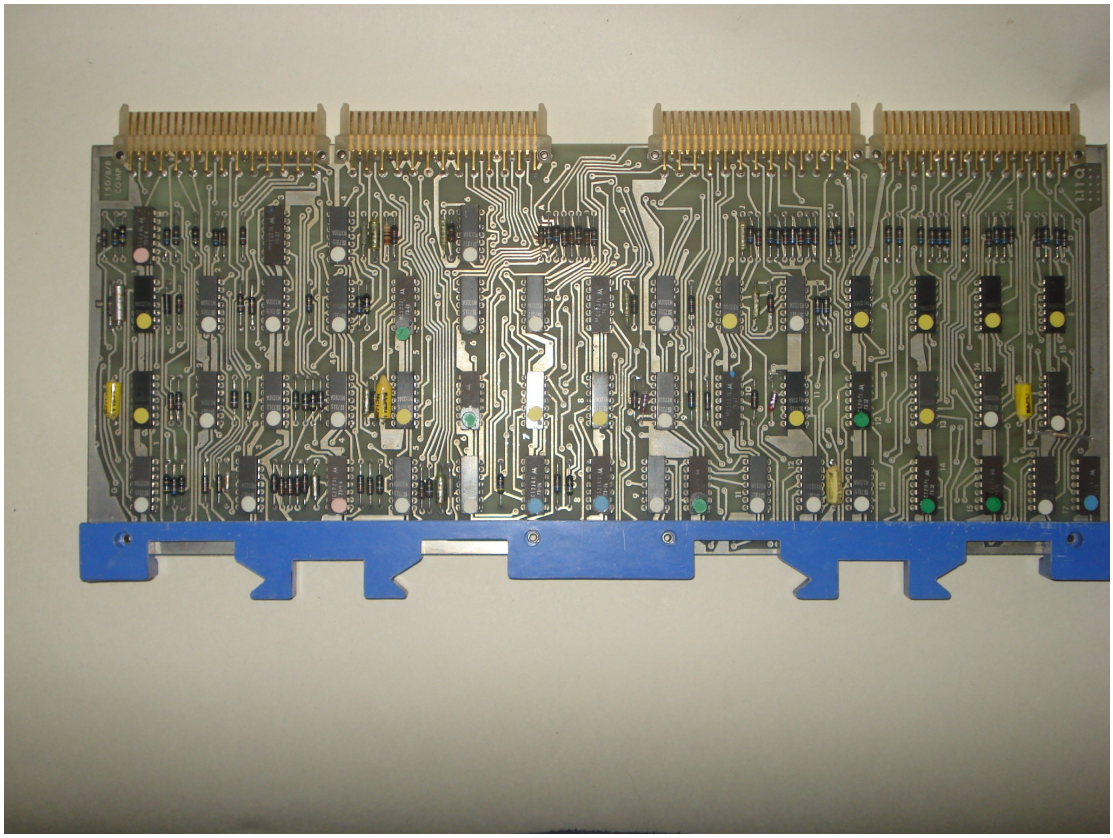


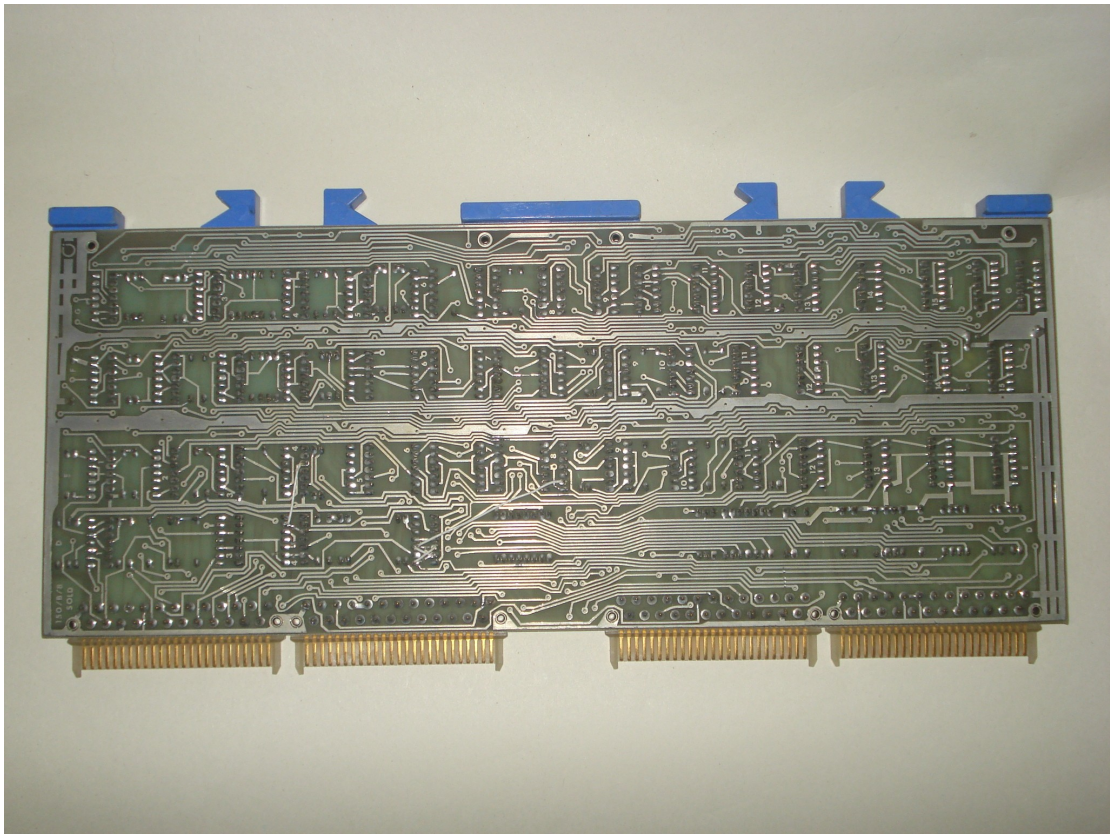




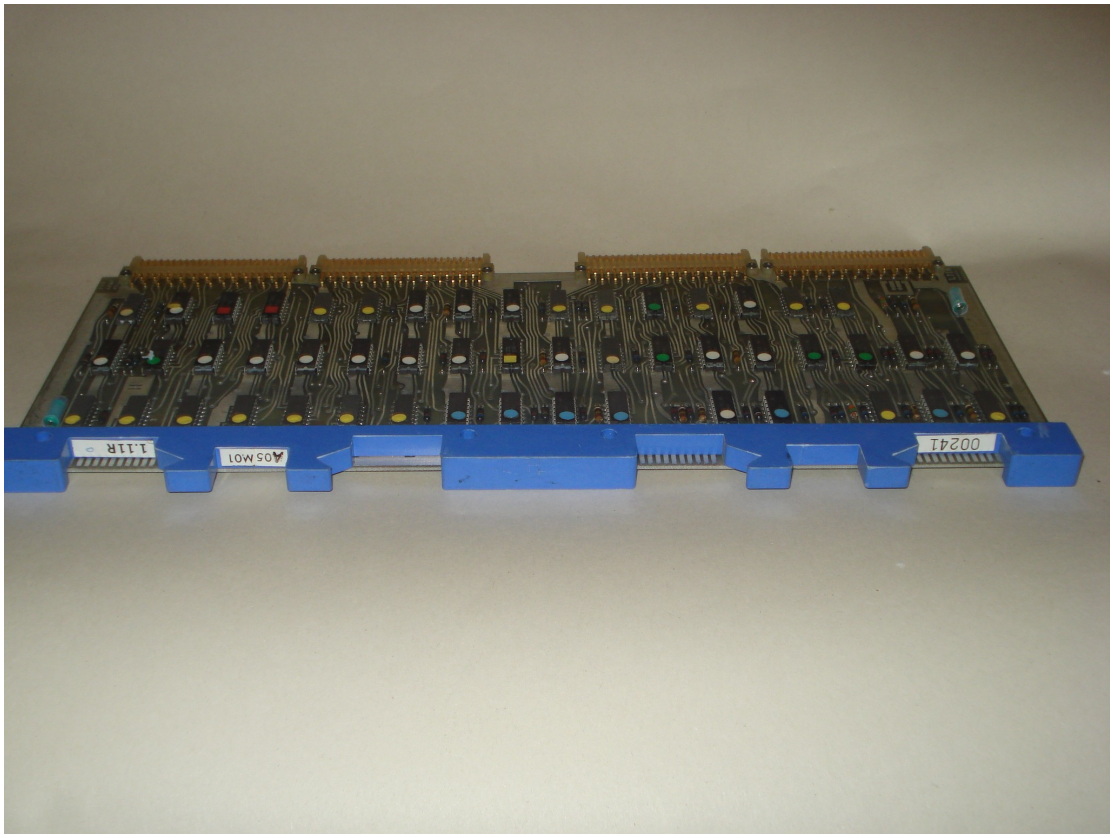
1.11Q Processor Interface Board

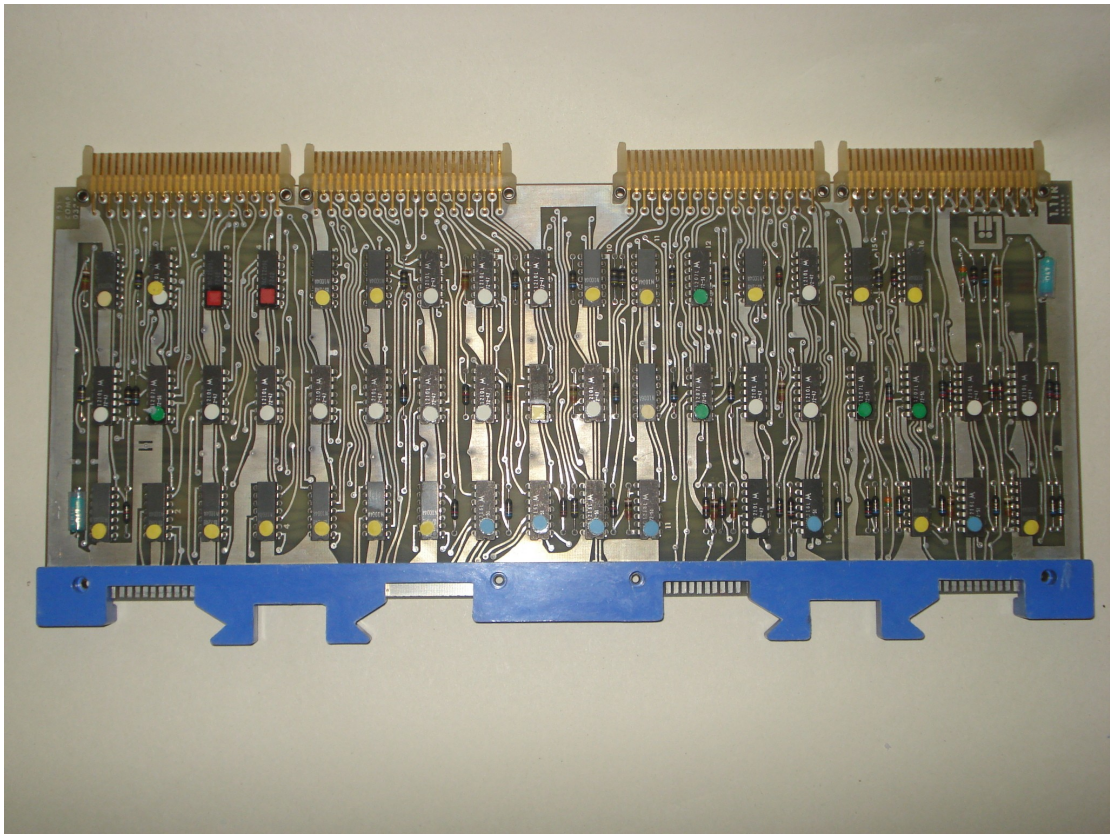


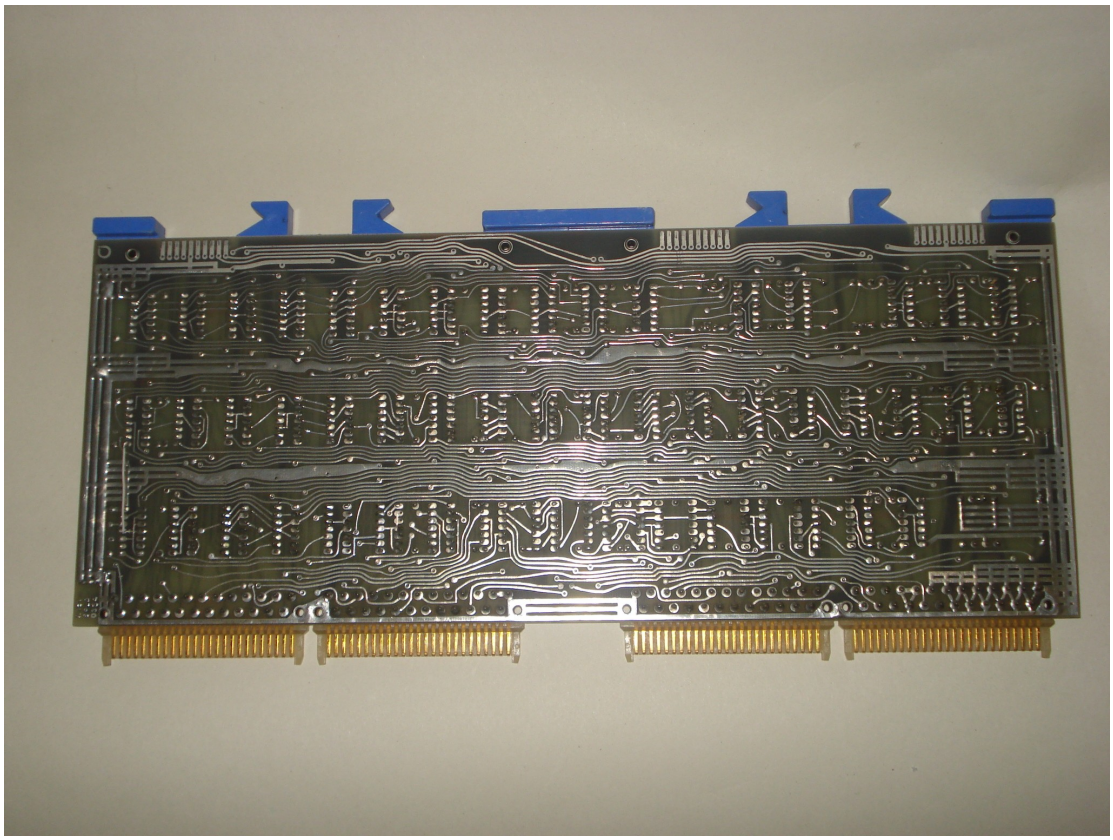




1.11R Control Board, Program Change







4. Manuals

4.1. Modular One Manuals

4.1.1. Modular One Service Handbook 1.12 Processor

4.1.2. Modular One Acceptance Test Handbook

Volume 1: Section 0; 1.11 Information Processor
Section 1; Logical Description
Some 1.11 course notes are included.
Binder labelled M.J Taylor CTL

Volume 2: Section 2; Waveform Source and distribution diagrams
Section 3; Board Logic Drawings.
Binder labelled M.J Taylor CTL

4.1.3. Modular One Outline System Specification PSU

Power supply types and calibration.

4.1.4. Modular One Outline System Specification 1.14

Modular One Functional Specification
1.14 Processor

4.1.5. Modular One Handbook 1.24 Semiconductor Store

Modular one Service Handbook 1.24 Semiconductor store.
Some course notes are included.
Binder labelled 1.24 Store

4.1.6. Modular One Handbook Peripheral Specifications

Outline Specification 1.21 core store.
Modular One Use manual 1.21 Direct Store
Outline Specification 1.31 Keyboard console.
Outline Specification 1.32 Paper Tape input module.
Outline Specification 1.33 Paper Tape output module.
Outline Specification 1.361 Line Printer.
Outline Specification 1.391 Real Time Clock.
Outline Specification 1.42 Storage Display.
Outline Specification 1.43 Digital Plotter.
Outline Specification 1.731 Buffered Interface.
Outline Specification 1.74 Digital Control System.
Binder labelled Mod 1?

4.1.7. Modular One Training Information

White Binder with (i) Semiconductor store etc. handwritten on the cover.
Comprising;
Semiconductor Store Course Notes
Outline Specification 1.11 Information Processor
Modular One Standard for Graphical Symbols
Interface Course Notes

4.1.8. Modular One Technicians Notebook?

A Small Twinlock pocket book 6” by 3.3” binder containing unofficial handwritten notes about the Modular one system components.

4.2. Modular One Software Manuals

4.2.1. Modular One User Manual E2 Executive

Volume labelled E2 Copy No. 1 this appears to be the controlling copy at NPL.
E1 Executive Nov 1971 69/282
1.811 Executive
Includes a two page document from NPL on how to boot the system.

E2 Executive Jan 1972 381/2/1U Issue 6
Introduces and describes the E2 Executive operating system and command set.

4.2.2. Second E2 Executive manual

White Binder labelled E2 on spine.

E2 Executive Jan 1972 381/2/1U Issue 6
Introduces and describes the E2 Executive operating system and command set.
Contains original CTL documentation notices on green paper.

4.2.3. Modular One User Manual E2 Utilities

Volume labelled E2 Utilities.
1.83/10/2 CEDIT
General purpose Context editor for any source data on paper tape.

1.83/3/2 KOPI
Copies and checks any paper tape.

1.83/2/2 MINIMODS
Used for debugging user programs via the console.

1.83/9/2 MODS
Comprehensive debugging system for user programs via the console.

1.83/11/2 FDMP
Allows the user to examine memory values for debugging purposes.

1.83/13/2 LIST
Produces a list of a source tape, can also verify tapes

4.2.4. Modus NAL Language Specification

This Volume is in a clear plastic flexible folder.
It contains a copy of DEMI.
NAL is the New Assembly Language for Modular one.

4.2.5. Modus NALA User Handbook

This Volume is unbound.
1.82/17/4 NALA is the assembler program for the New Assembly Language for Modular one and requires executive E4.

4.2.6. Modular One Loose documents

Unbound
1.83/3/2 KOPI
Copies and checks any paper tape.

1.83/9/2 MODS
Comprehensive debugging system for user programs via the console.

1.83/11/2 FDMP
Allows the user to examine memory values for debugging purposes.
1.88/18/1 DEMI
A copy by JH Morgan 20 July 1971
Used for on-line debugging

4.3. Teletype Manuals

2 sets comprising;
Technical Manual 33 Teletypewriter sets RO, KSR and ASR
Bulletin 310B Volume 1
Bulletin 310B Volume 2
Teletypewriter 33 Page printer set Parts
Bulletin 1184B
Addendum to 1184B, standardisation parts

Circuit Diagram CD-8-1483-D dated 04-05-1972

Data Dynamics Technical Supplement for the Models 32 & 33 Page Printers with Operator's Handbook

4.4. High Speed Paper Tape Reader Manuals

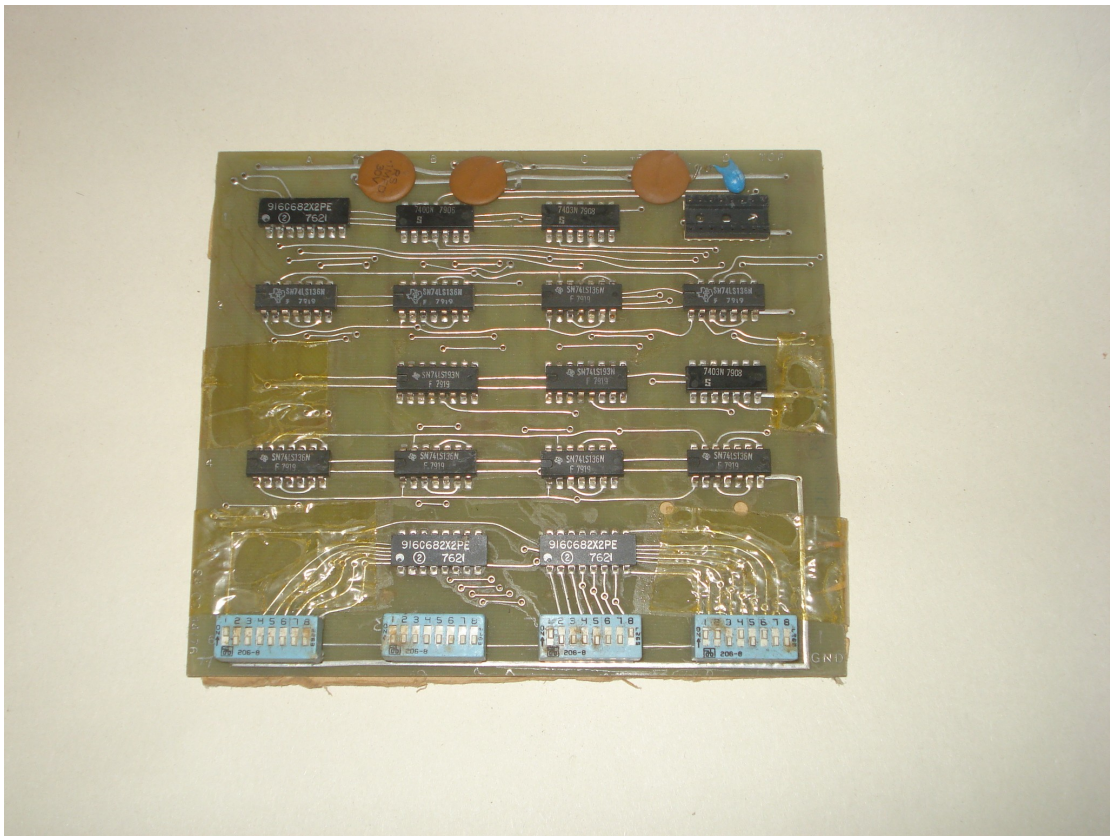
2 copies of the manufacturers manual from GNT Automatic A/S, titled Photo Electric Tape Reader Model 4101.

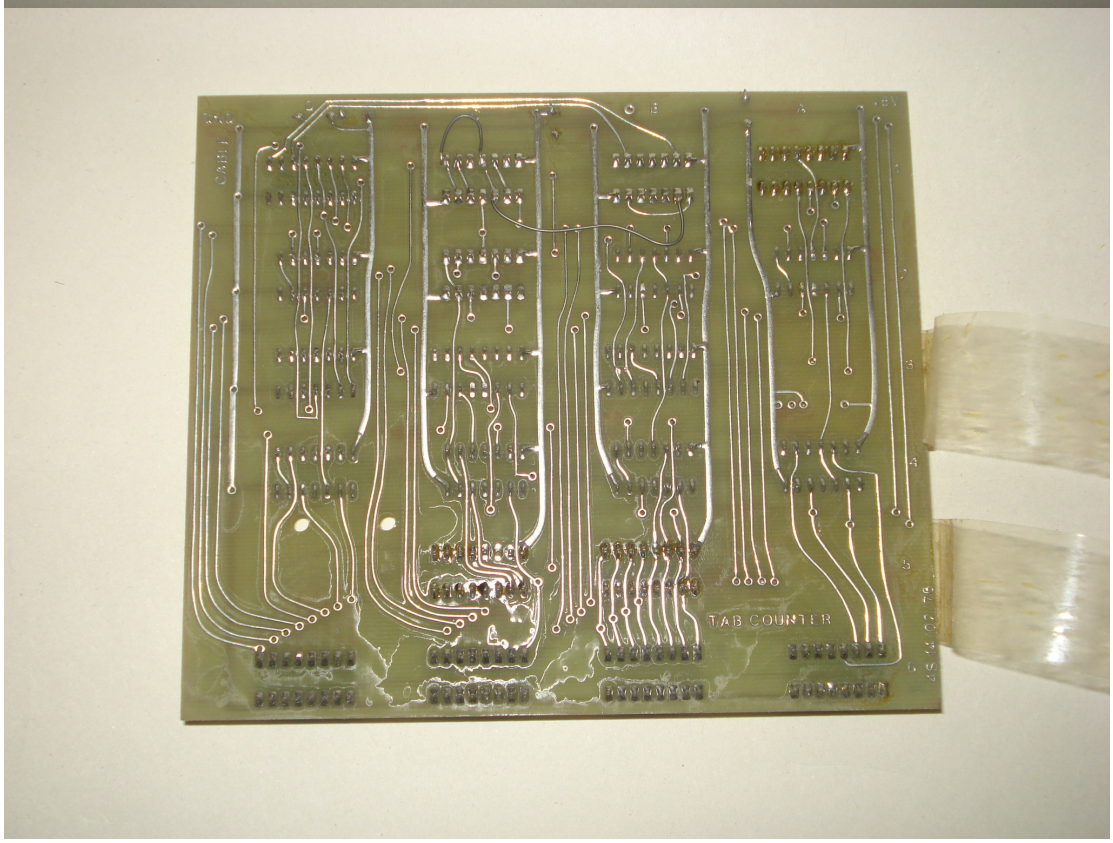
5. *Accessories*

5.1. Circuit boards

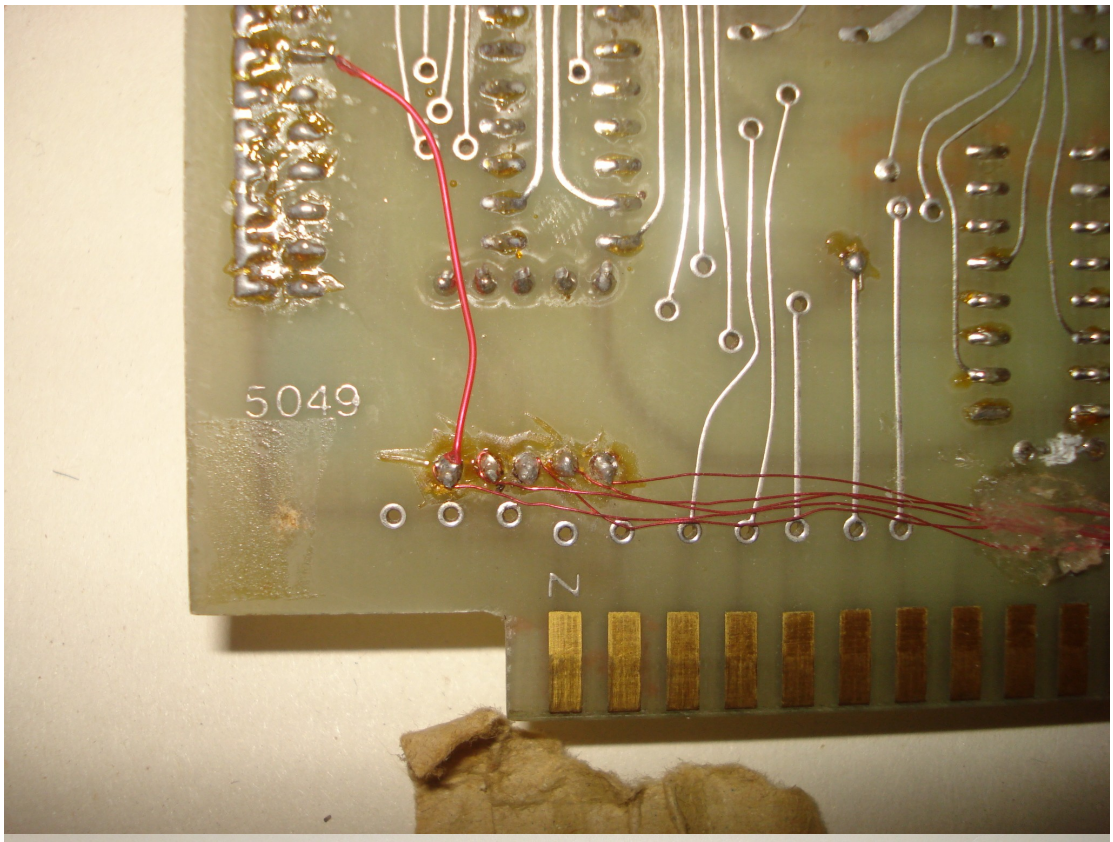
Type	Archive & Mod No.	Serial number	Description	Condition
4S 14/02/76	None	None	TAB Counter Board TTL Devices Note on cardboard says; “ONC No in Octal each from LH Margin”	Good
5049	None	None	Board with Ribbon cable header, use unknown.	Modified
1.392	A01 M00	00064	Thought to be a Real Time Clock, It has CMOS devices and may be a CMOS version of the 1.391 RTC mentioned in the manuals as it uses a similar Crystal assembly.	Good

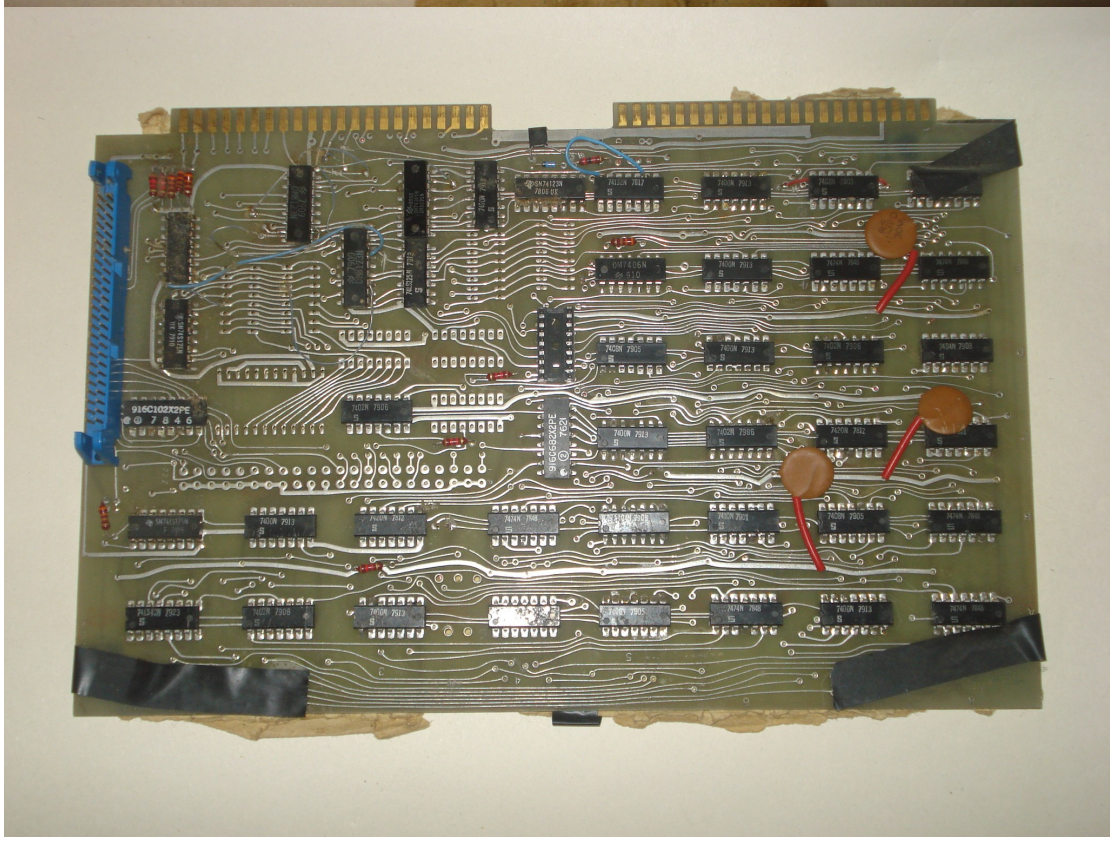
Tab Counter Board images

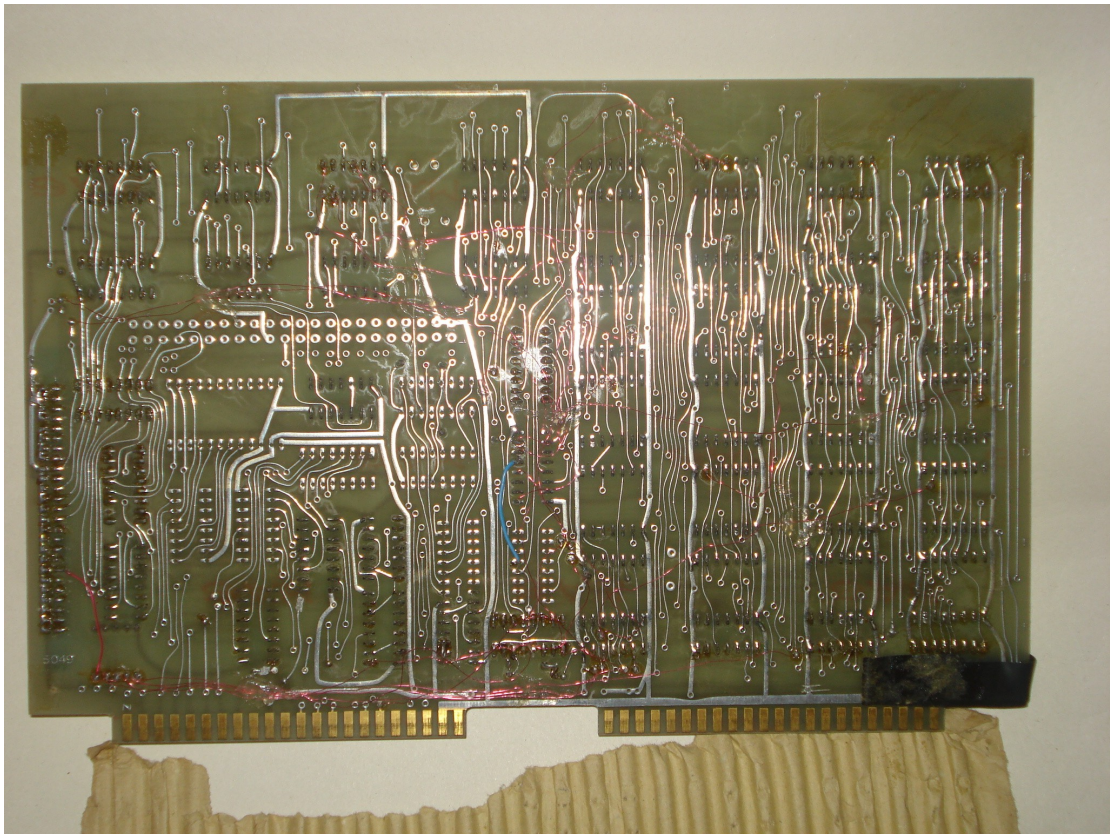
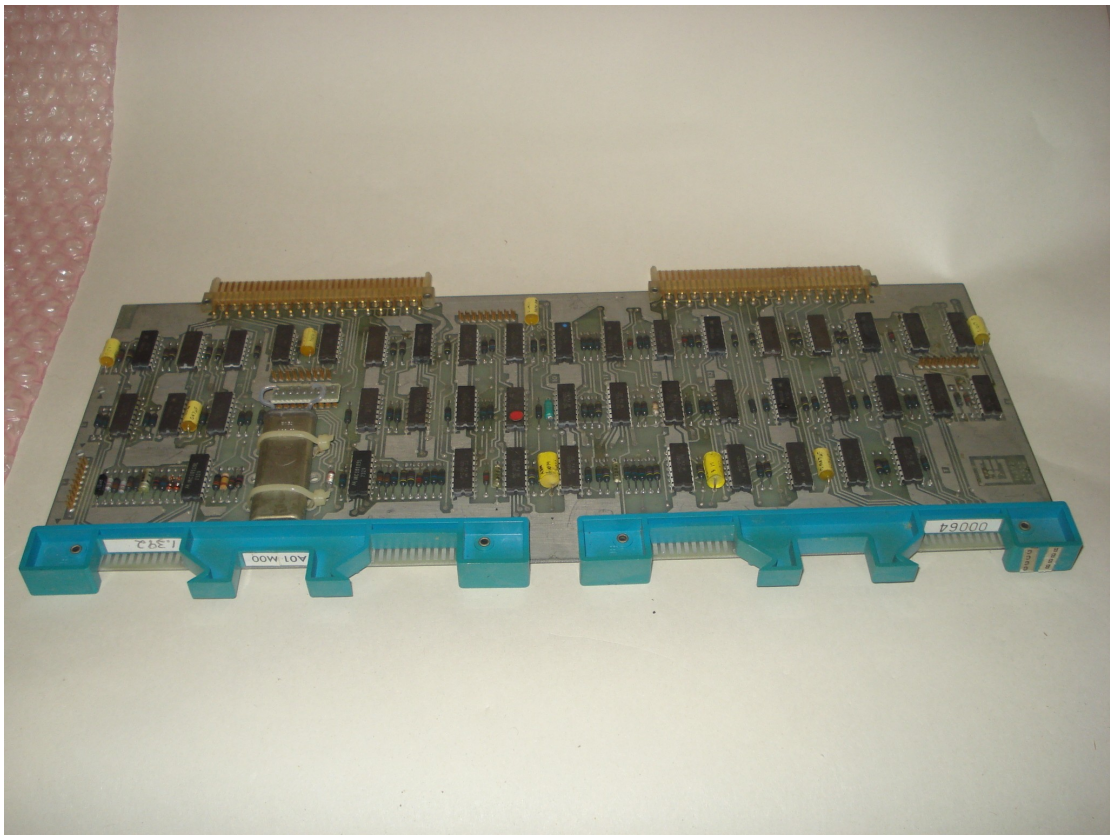
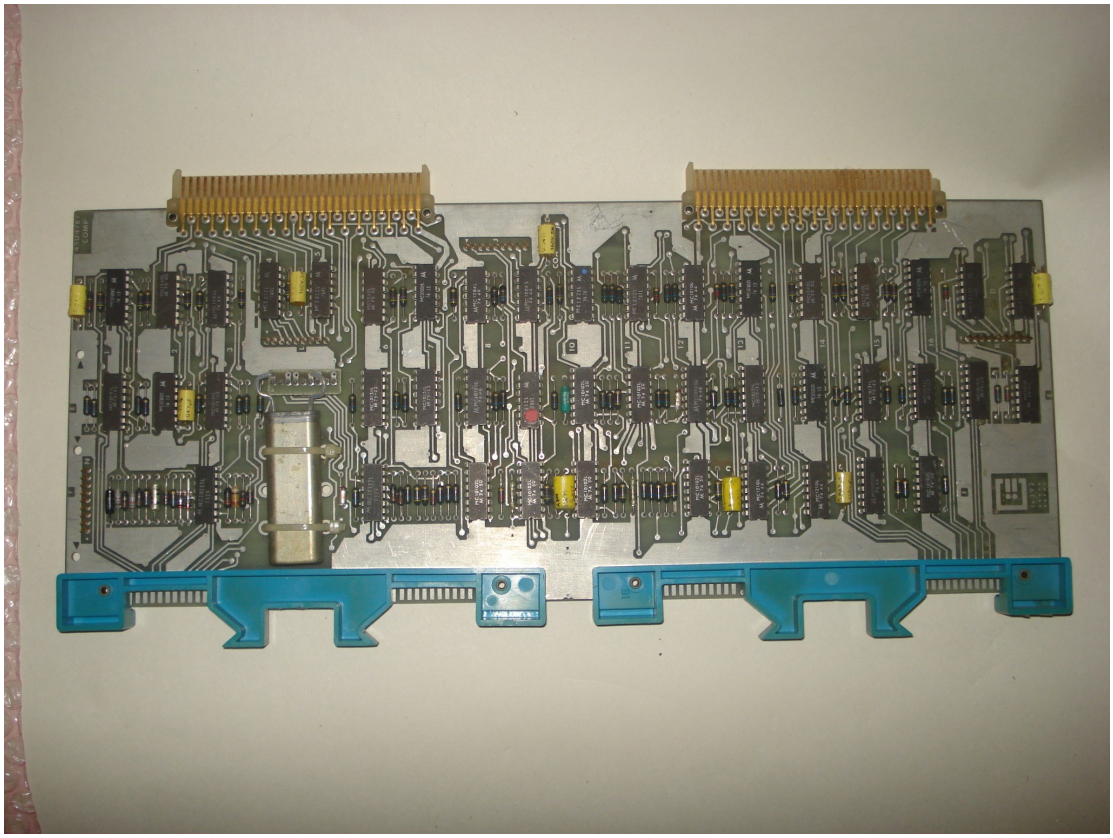
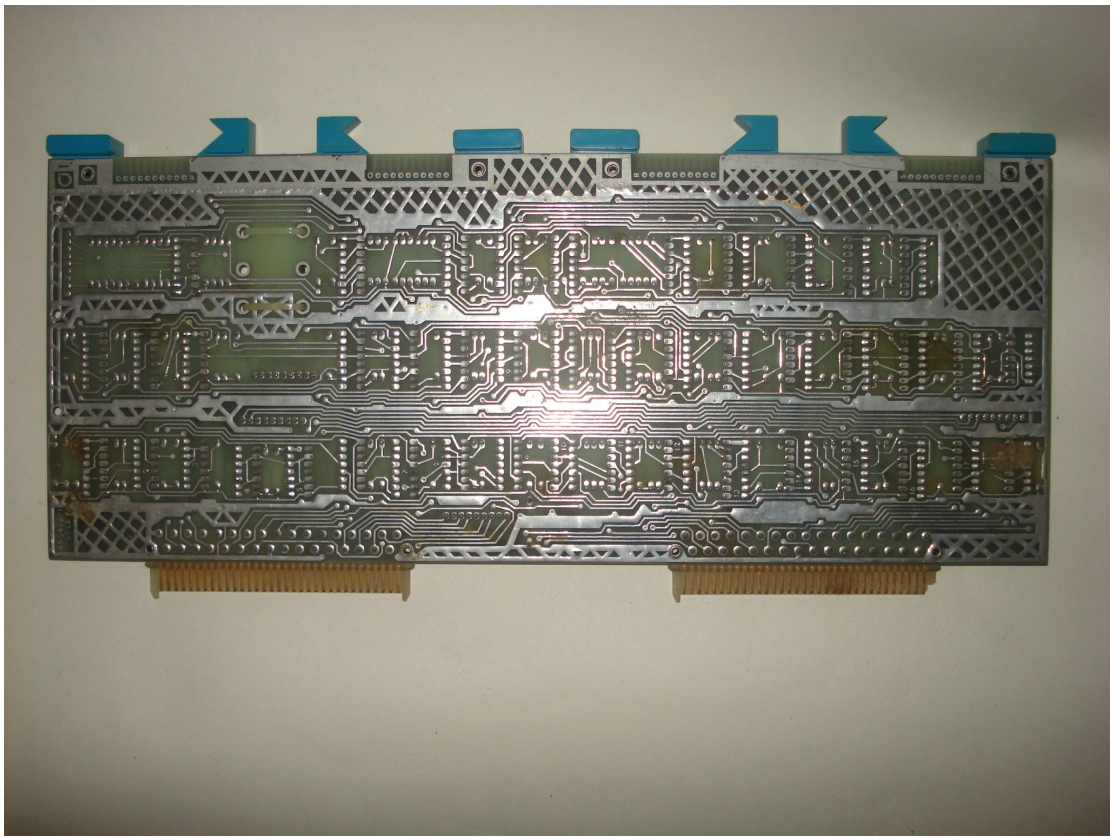



TAB COUNTER

5049 Board images







1.392 images