

AccessionIndex: TCD-SCSS-T.20121208.048

Accession Date: 8-Dec-2012

Accession By: Tom Kearney

Object name: Heurikon HSE-10R

Vintage: c.1988

Synopsis: 5U rackmounted modular industrial microcomputer, equipped with image processing boards. Chassis S/N: HSE-0888-056.

Description:

5U rackmounted modular industrial microcomputer, equipped with five VME boards for image processing.

The five boards are installed, in order top-to-bottom:

- (1) Imaging Technology Inc ADI-150-VD (EN552) board with plug-on card EN565. Probably the analog-to/from-digital interface, with camera video inputs and display video outputs. The main board contains an L1A0946 CPS plus logic. The plug-on board contains a Brooktree Bt101KC30 ADC and a TRW 1048N6C video DAC, and connects via flat 10-coax cable to the ten rear BNC video connectors.
- (2) Imaging Technology Inc EAN697 board with plug-on card EL653. Probably a frame buffer. The main board contains L1A0737 SAC and L1A0944 EAC chips. The plug-on board contains 32 x NEC uPD41464-12 64k x 4-bit 120nS nMOS dynamic RAMs (1MByte) plus 8 x L1A0738 SRU. It is not clear what the L1A0738 chips are for.
- (3) Imaging Technology Inc ALU-150-V (EFN506) board. Probably an image arithmetic & logic processing unit. It contains an L1A1644 ALU, an L1A0946 CPS, and an Am25S557DC 8 x 8 multiplier.
- (4) Imaging Technology Inc EPN280 board. Probably a real-time clock. It contains an L1A1644 ALU, an L1A0946 CPS, and four other unidentified large-scale integrated circuits.
- (5) Heurikon MK68/VPE board. General-purpose MC68020-based processor board containing an MC68020RC25E CPU, MC68881RC25A FPU, 3 x Z8530 SCC serial interfaces, WD33C93JN SCSI controller, Xilinx XC2064-70 FPGA, a large number of ALS645A-1 bus transceivers, an OS-9 V2E VER 2.3 1073 BIOS EPROM, and 36 x DRAMs.

The L1Axxxx chips are from IT Inc (ITI) Hong Kong. The L1A0946 CPS appears to be common to each board, and therefore may be a VME bus controller.

Accession Index	Object with Identification
TCD-SCSS-T.20121208.048.01	Heurikon HSE-10R Chassis. S/N: HSE-0888-056
TCD-SCSS-T.20121208.048.02	Imaging Technology Inc ADI-150-VD rev.B EN552 r.B10/497 copyright 1985, plug-on card EN565 r.B4/496.
TCD-SCSS-T.20121208.048.03	Imaging Technology Inc EAN697 r.B12/508 FB-150-VME Layer 6 rev.B, plug-on card EL653 r.A/342.
TCD-SCSS-T.20121208.048.04	Imaging Technology Inc ALU-150-V rev.B Layer 6 EFN506 r.B6/494 copyright 1986.
TCD-SCSS-T.20121208.048.05	Imaging Technology Inc EPN280 R.B3/492 RTC-150-V Layer 6 Rev.B copyright 1986.
TCD-SCSS-T.20121208.048.06	Heurikon MK68/VPE Madison Wisconsin copyright 1988.



Figure 1: Heurikon HSE-10R right three-quarter top view



Figure 2: Heurikon HSE-10R left three-quarter top view



Figure 3: Heurikon HSE-10R front top view



Figure 4: Heurikon HSE-10R rear top view



Figure 5: Heurikon HSE-10R rear view



Figure 6: Heurikon HSE-10R chassis S/N: HSE-0888-056



Figure 7: Heurikon HSE-10R rear BNC video connectors
CAM 0, CAM 1, CAM 2, GRAY, BLACK
RED, GREEN, BLUE, YELLOW, BROWN

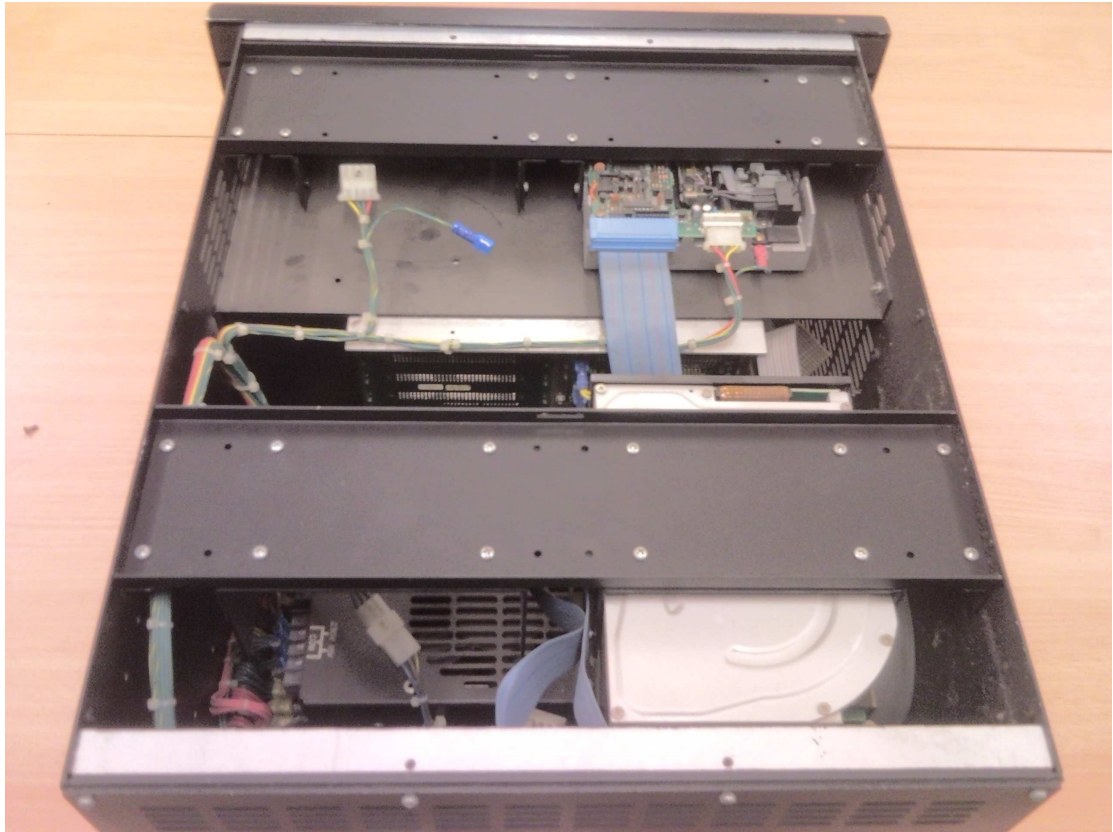


Figure 8: Heurikon HSE-10R rear top internal view

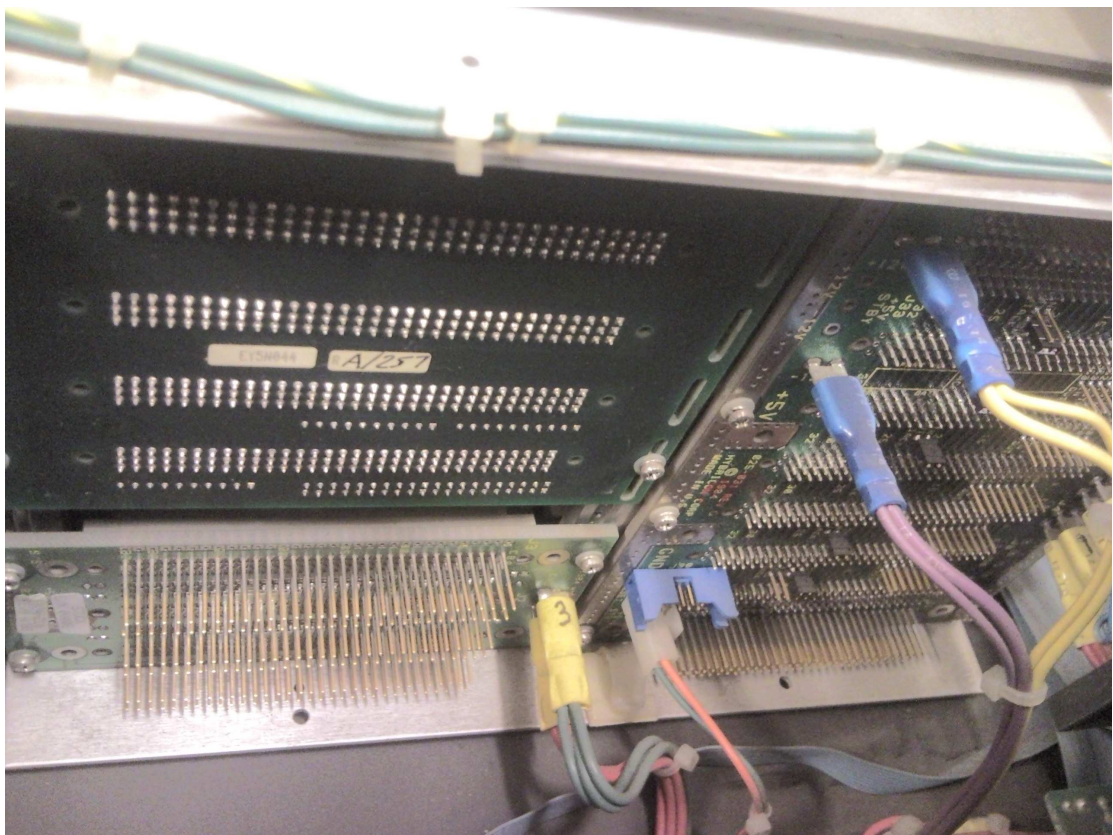


Figure 9: Heurikon HSE-10R backplane rear view

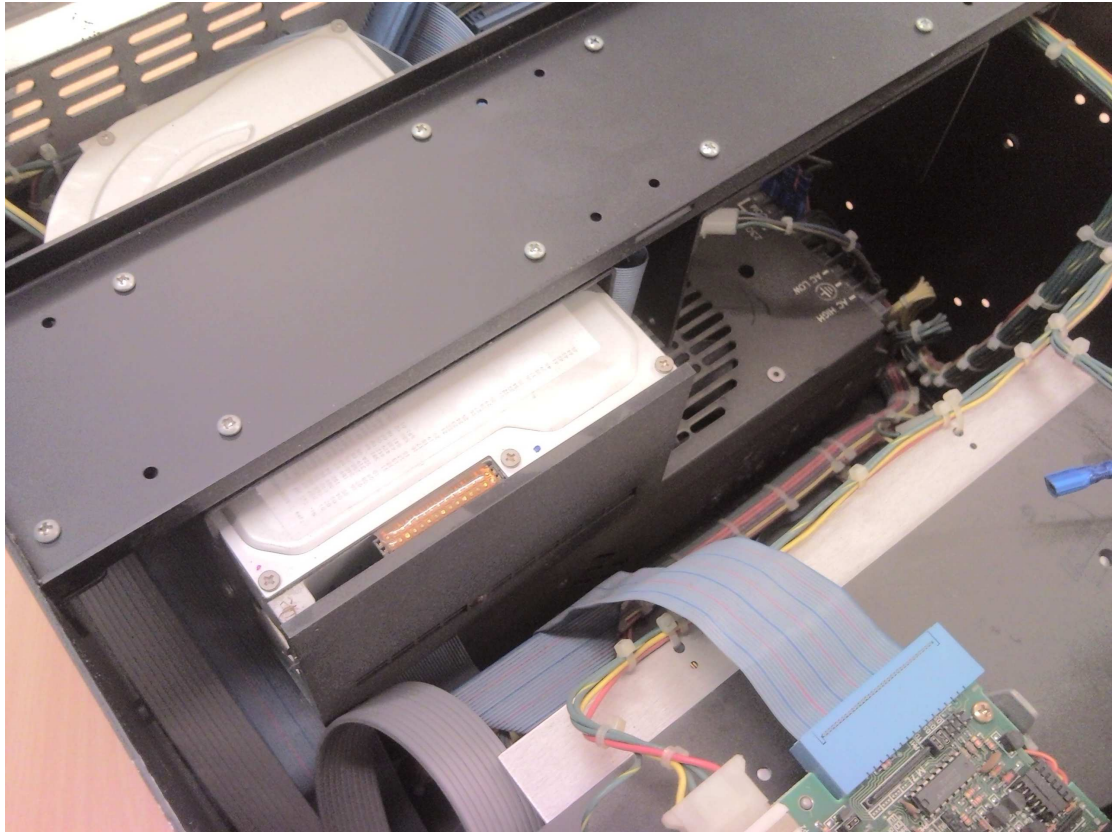


Figure 10: Heurikon HSE-10R disk and disk controller

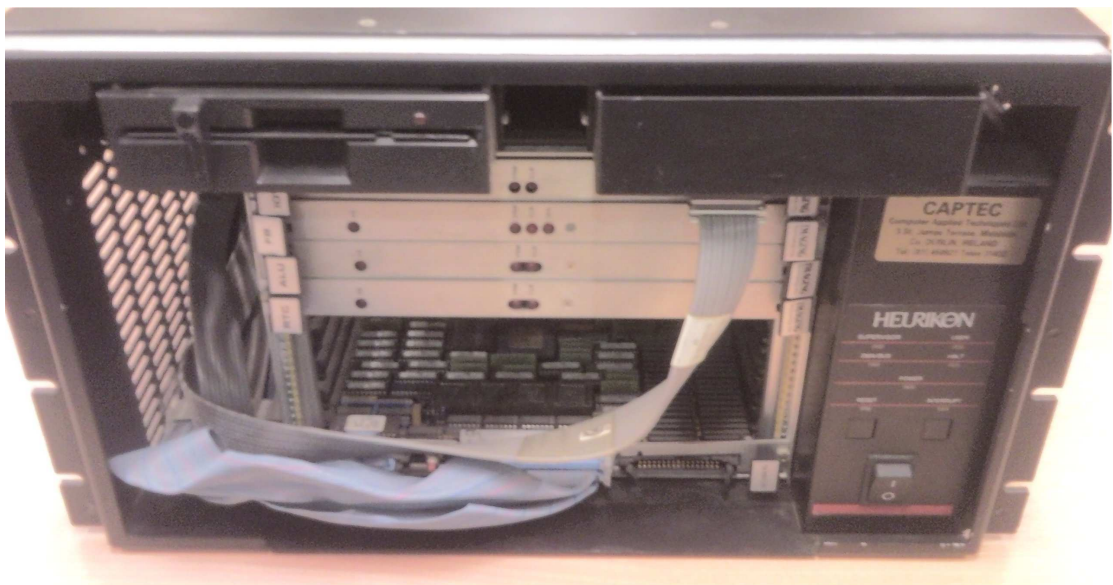


Figure 11: Heurikon HSE-10R front internal view



Figure 12: Heurikon HSE-10R front panel controls



Figure 13: Heurikon HSE-10R card cage front view

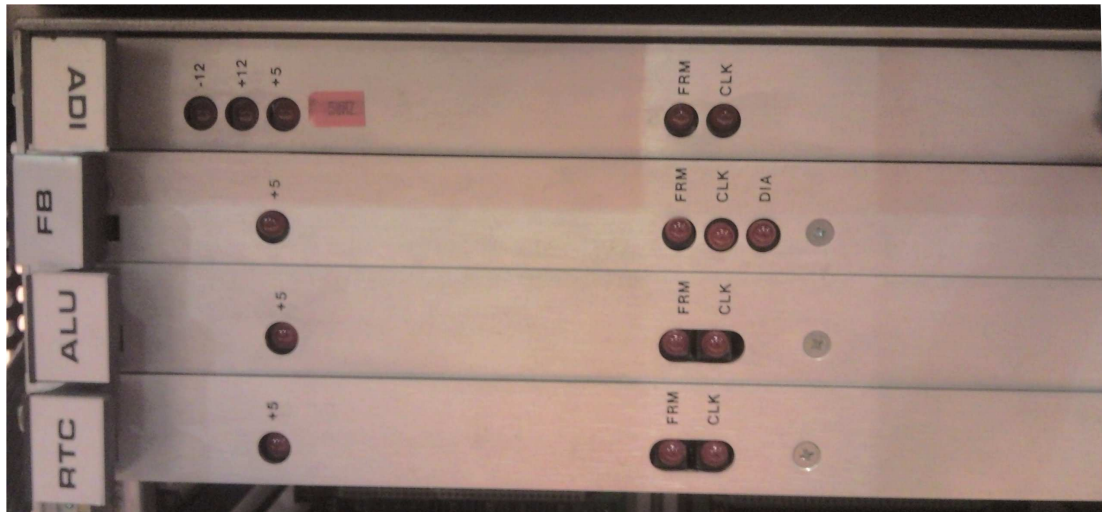


Figure 14: Heurikon HSE-10R boards 1-4 left front panels



Figure 15: Heurikon HSE-10R boards 1-4 right front panels

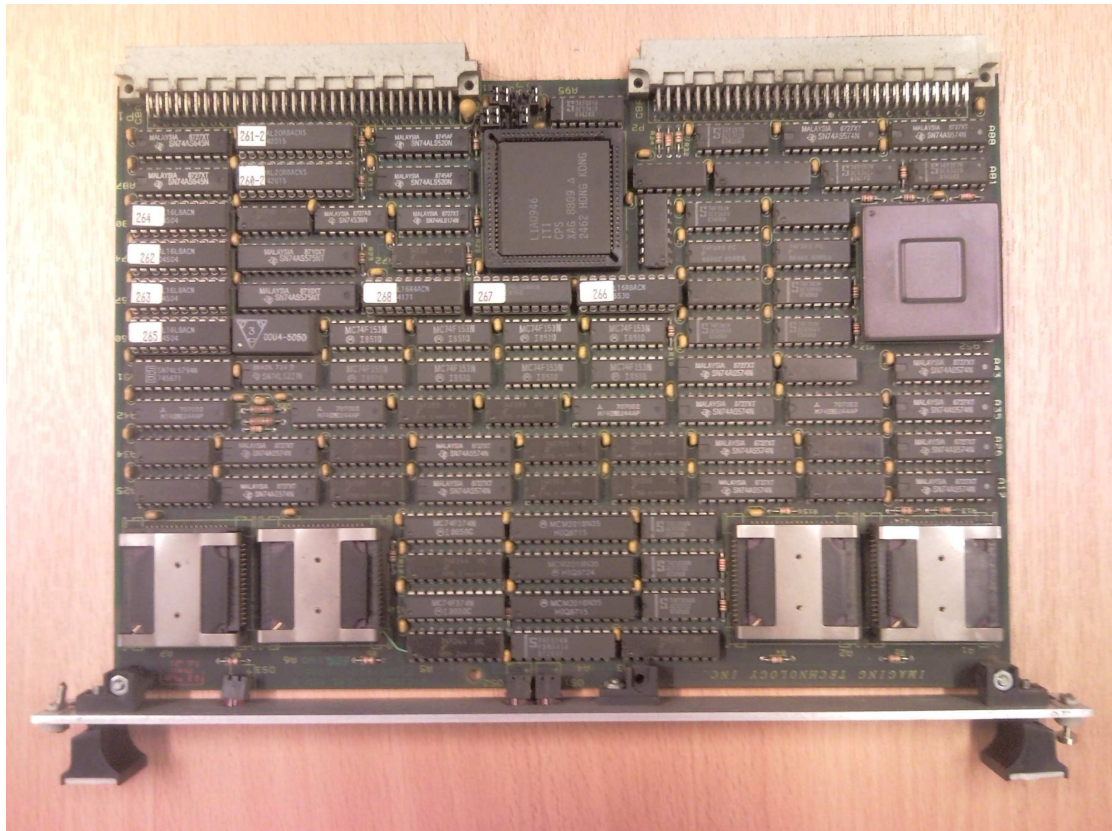


Figure 16: Heurikon HSE-10R board 4 top view

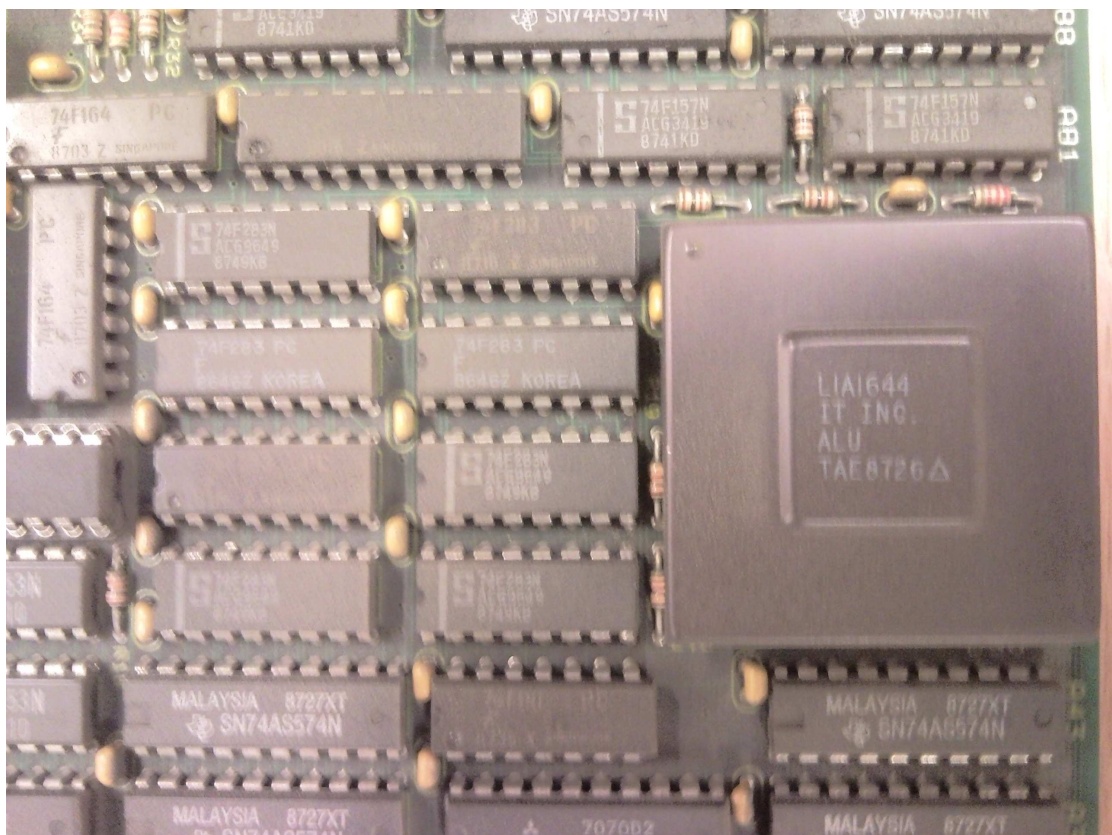


Figure 17: Heurikon HSE-10R board 4 closeup

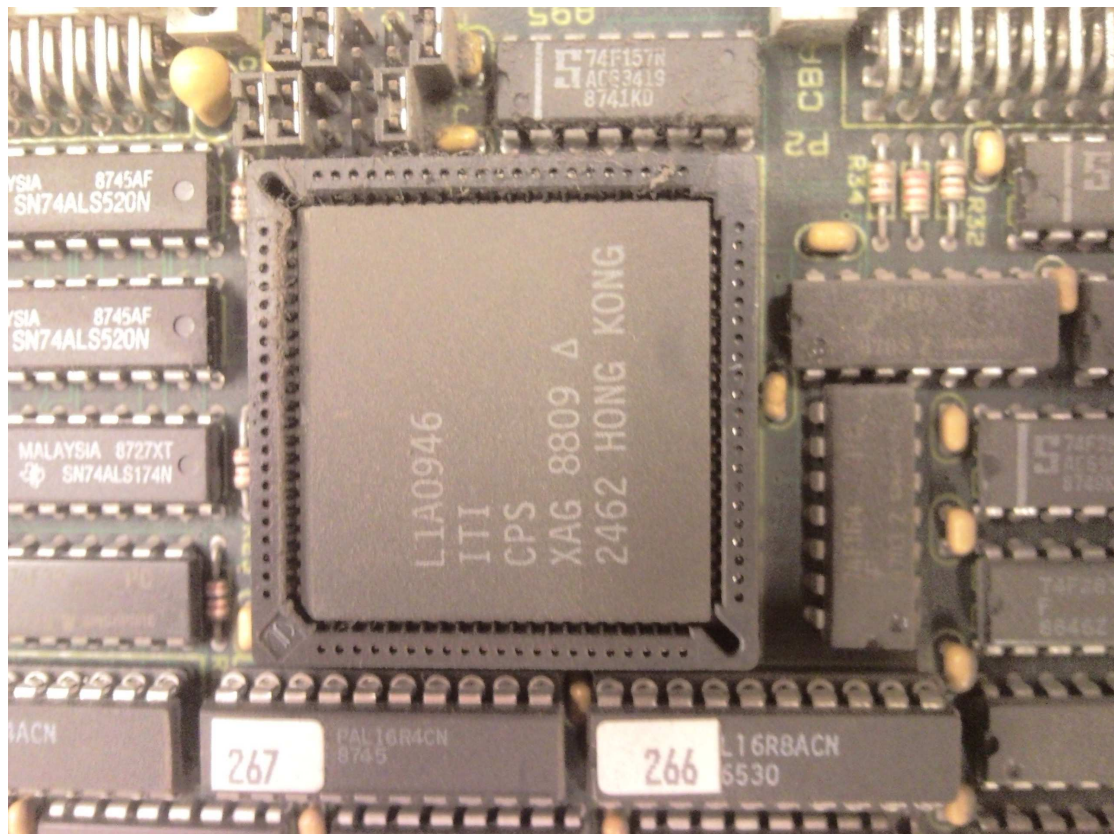


Figure 18: Heurikon HSE-10R board 4 closeup

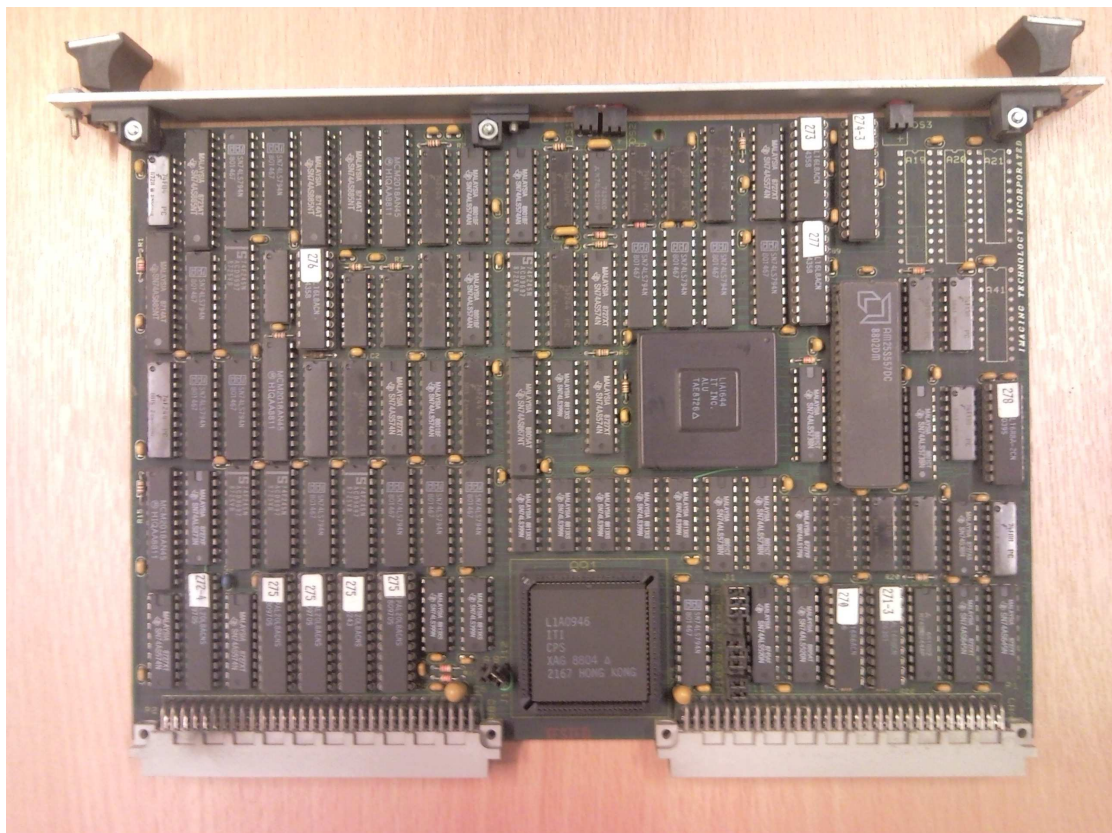


Figure 19: Heurikon HSE-10R board 3 top view

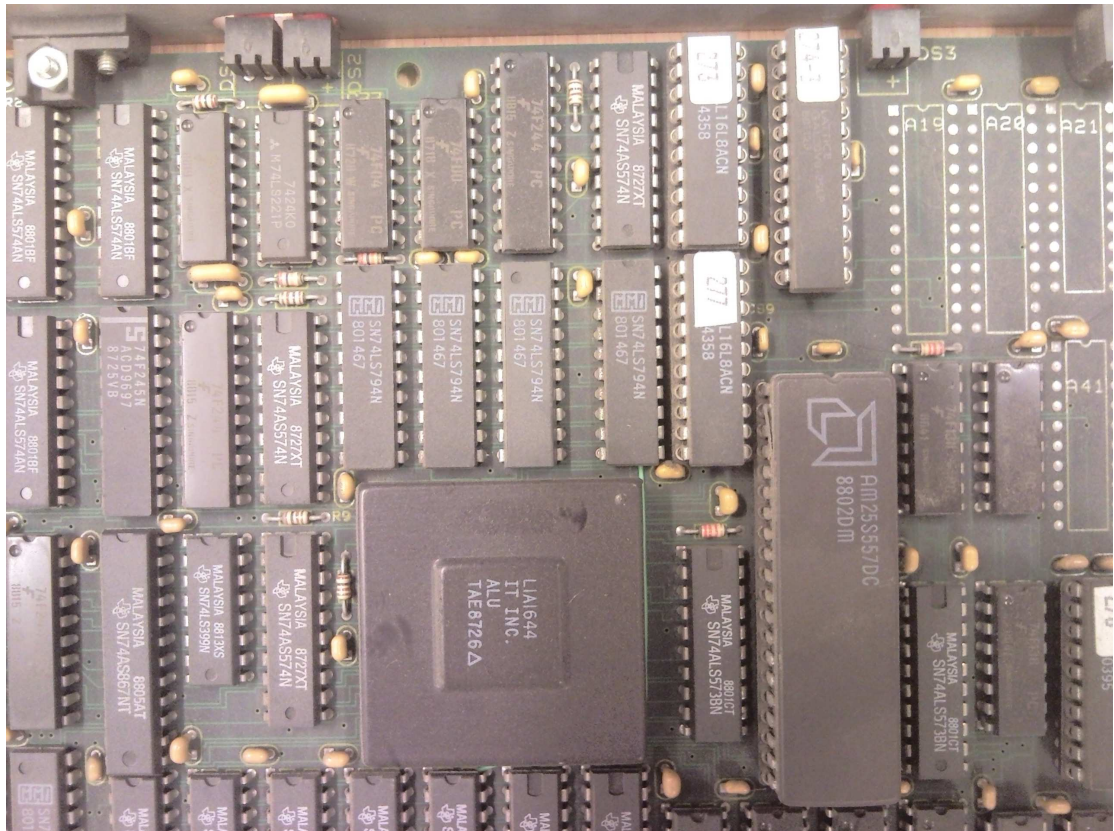


Figure 20: Heurikon HSE-10R board 3 closeup

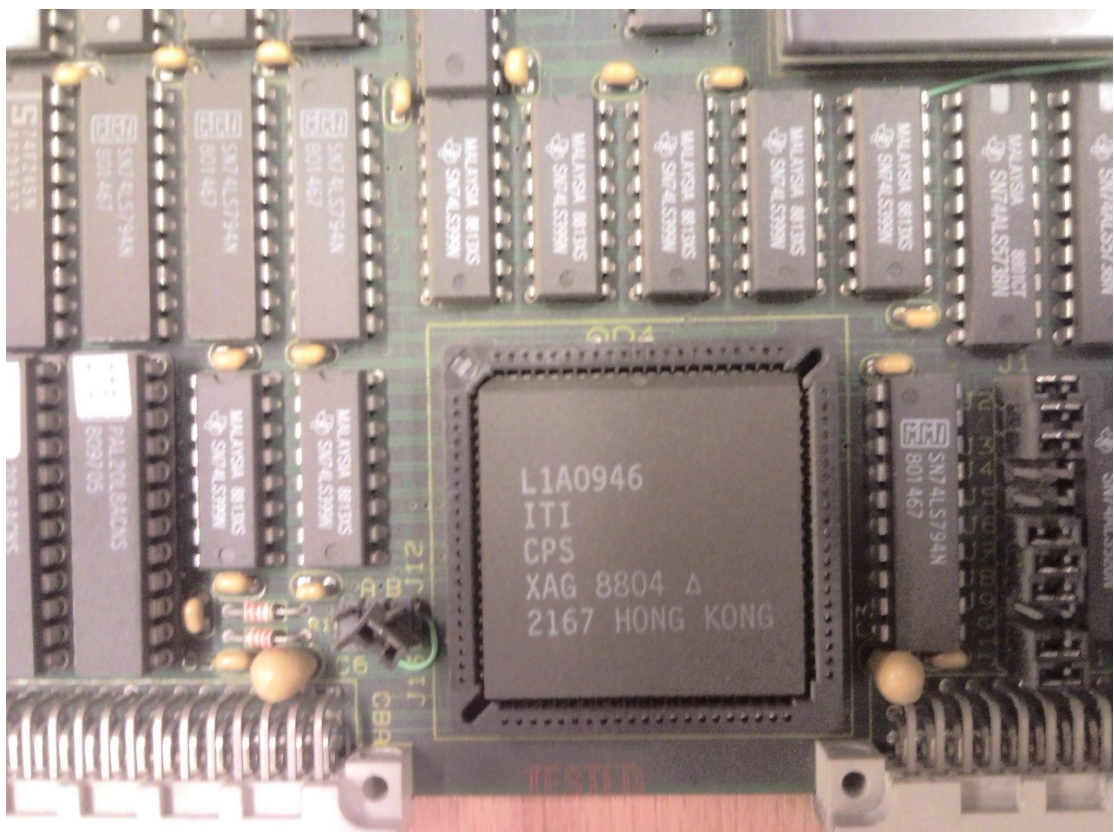


Figure 21: Heurikon HSE-10R board 3 closeup

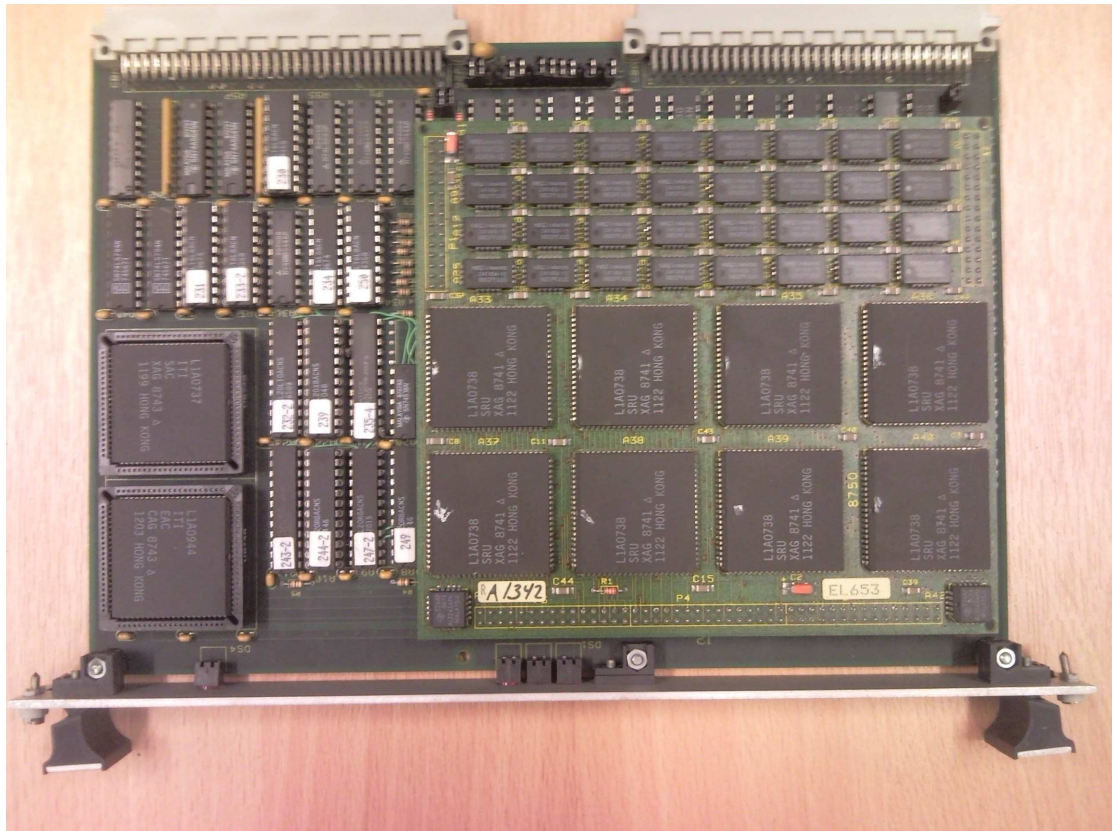


Figure 22: Heurikon HSE-10R board 2 top view

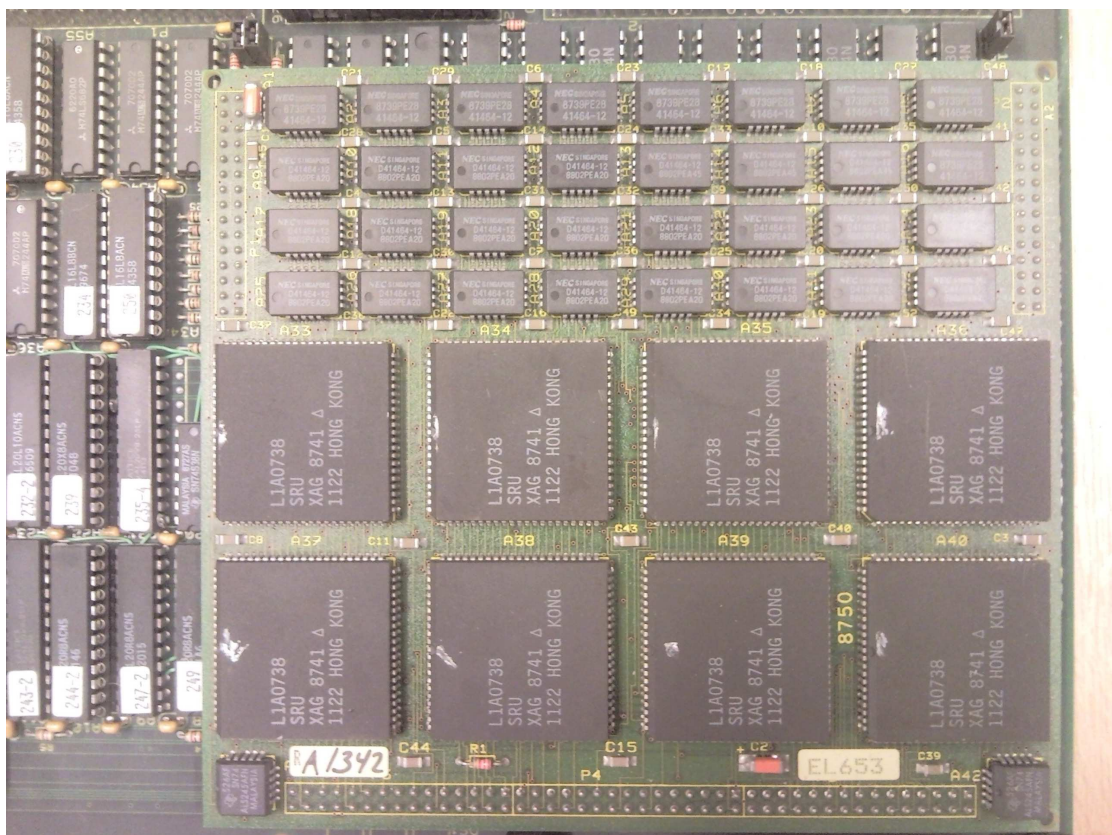


Figure 23: Heurikon HSE-10R board 2 plug-on board closeup

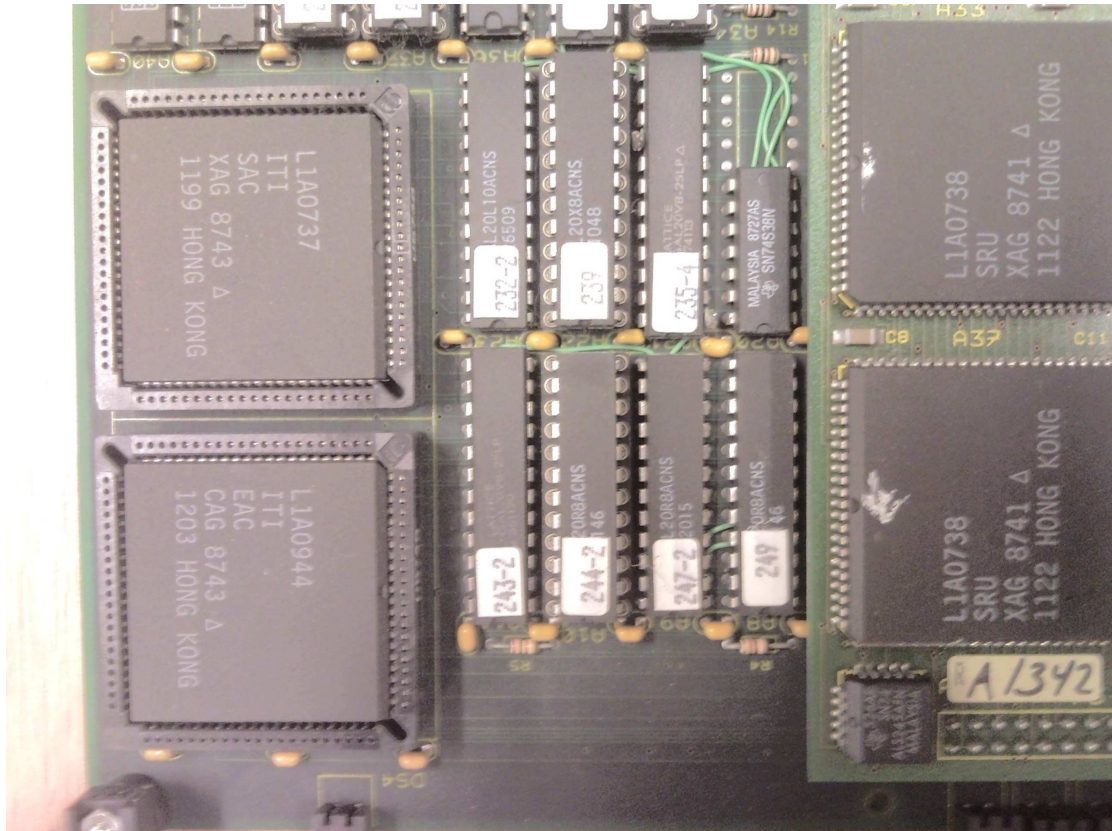


Figure 24: Heurikon HSE-10R board 2 closeup

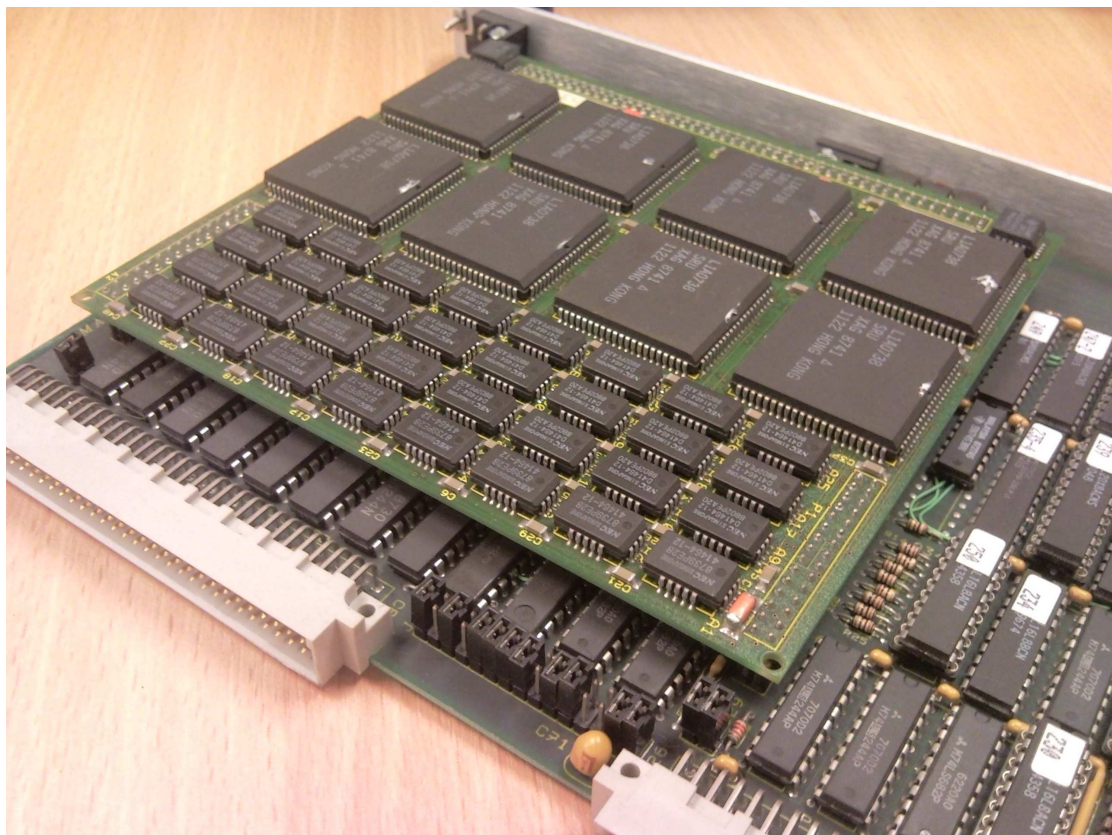


Figure 25: Heurikon HSE-10R board 2 rear three-quarter view

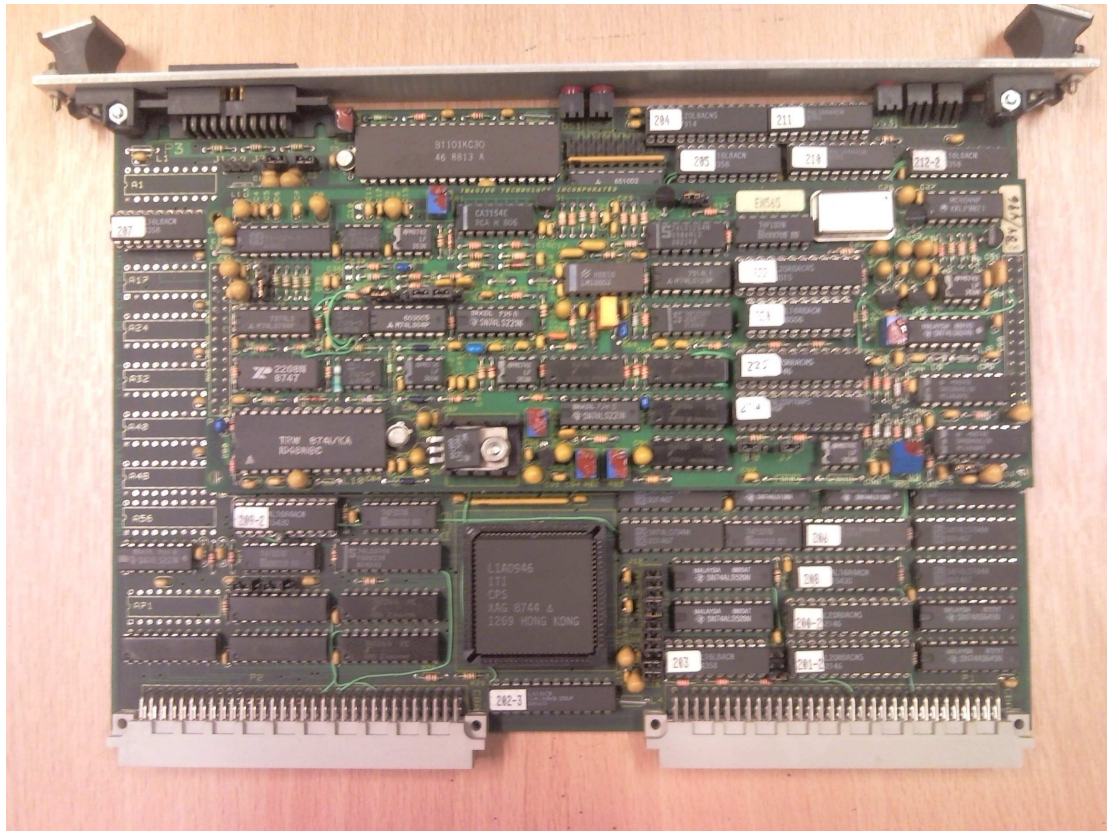


Figure 26: Heurikon HSE-10R board 1 top view

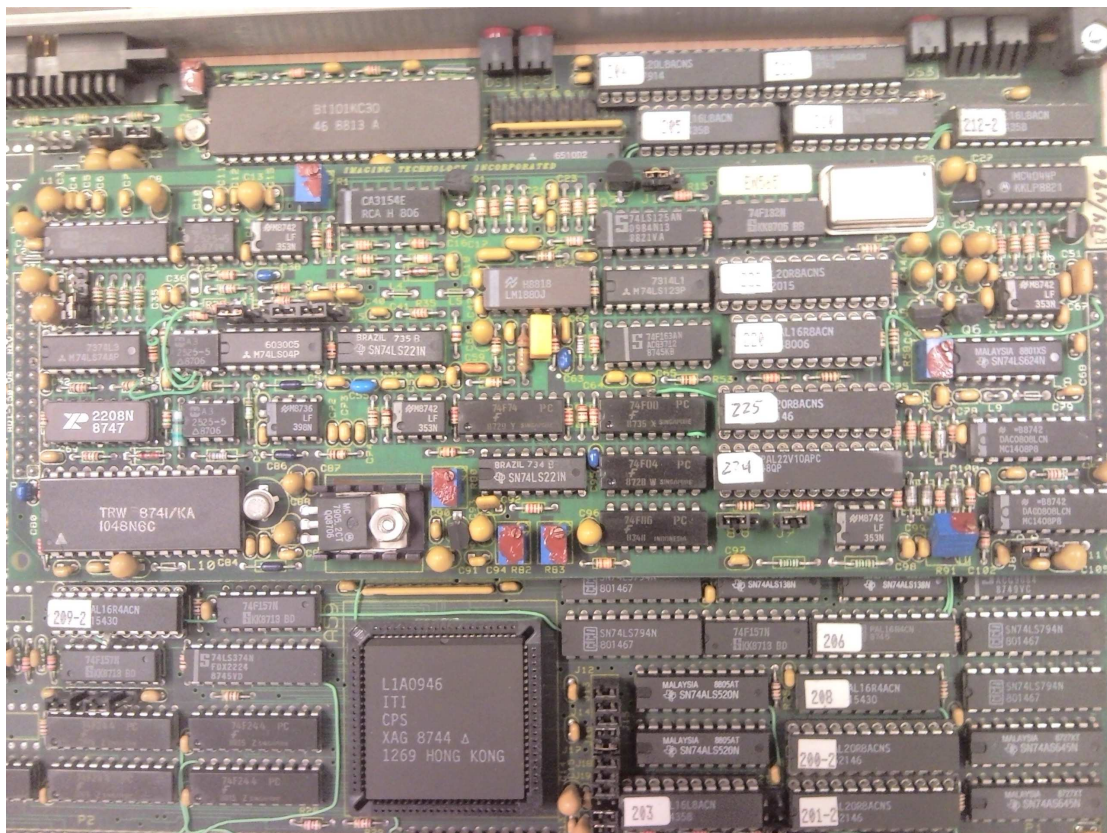


Figure 27: Heurikon HSE-10R board 1 closeup

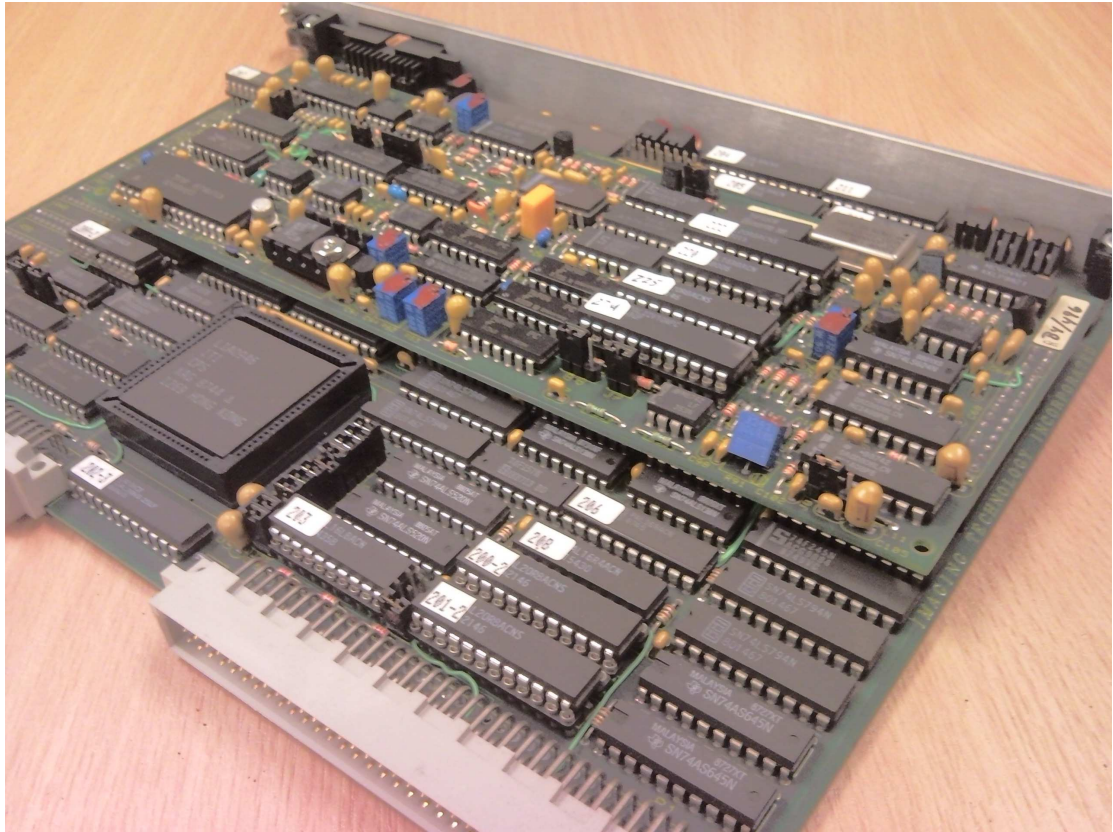


Figure 28: Heurikon HSE-10R board 1 rear three-quarter view

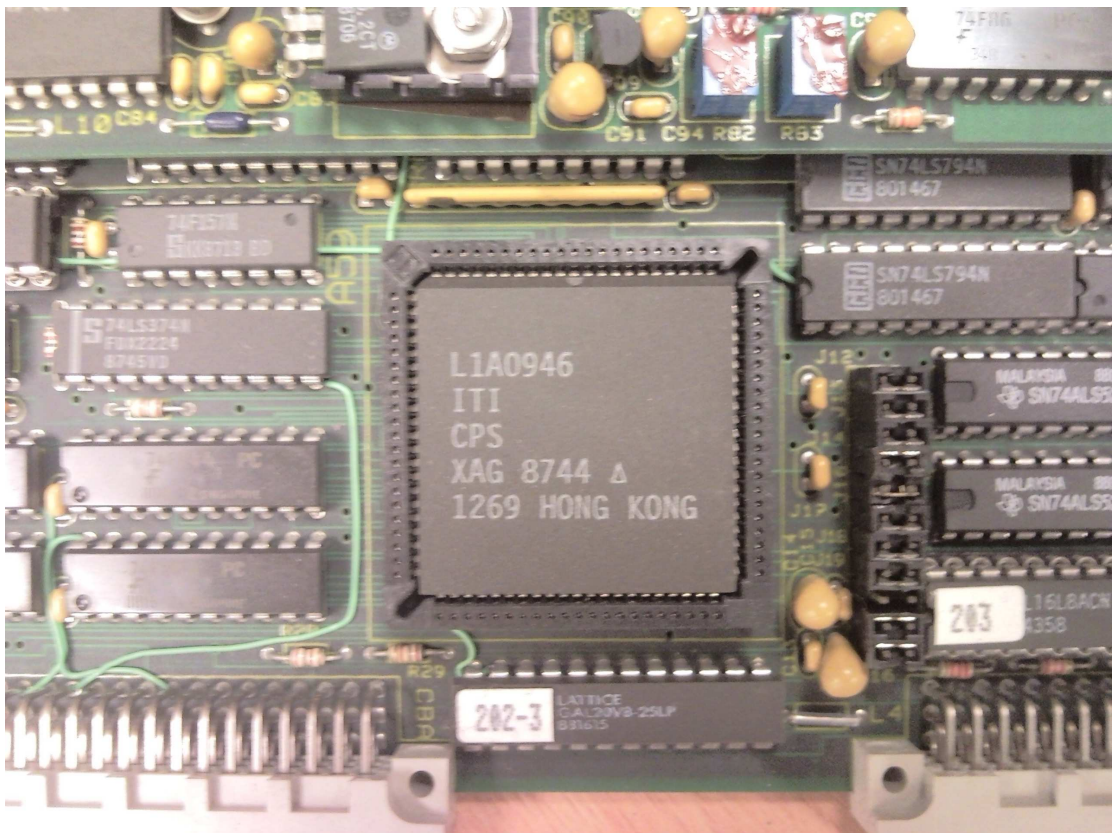


Figure 29: Heurikon HSE-10R board 1 closeup

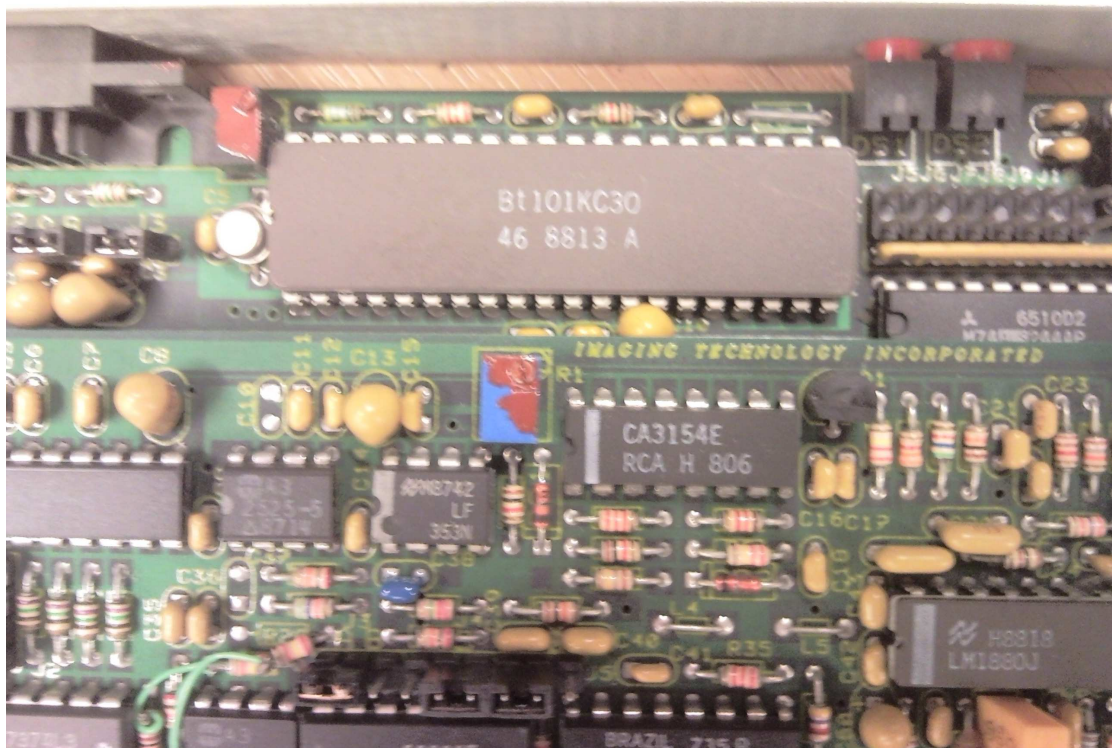


Figure 30: Heurikon HSE-10R board 1 plug-on board closeup



Figure 31: Heurikon HSE-10R backplane front view

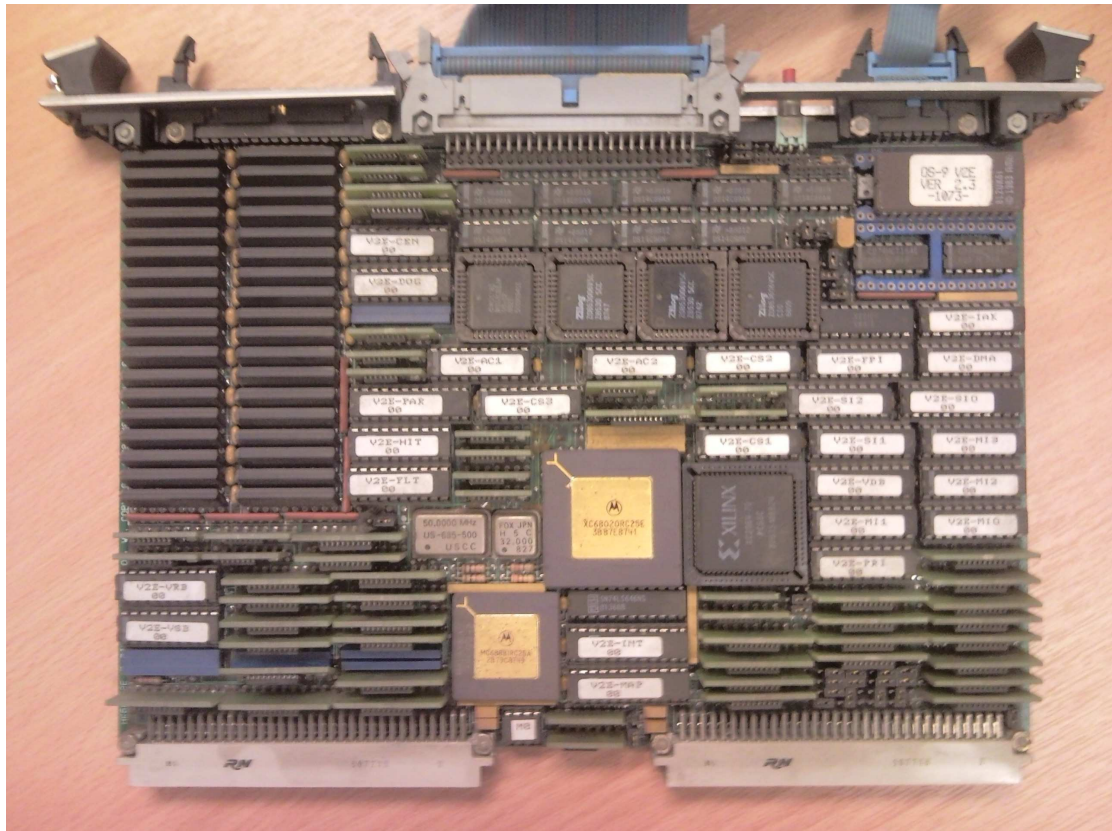


Figure 32: Heurikon HSE-10R board 5 top view

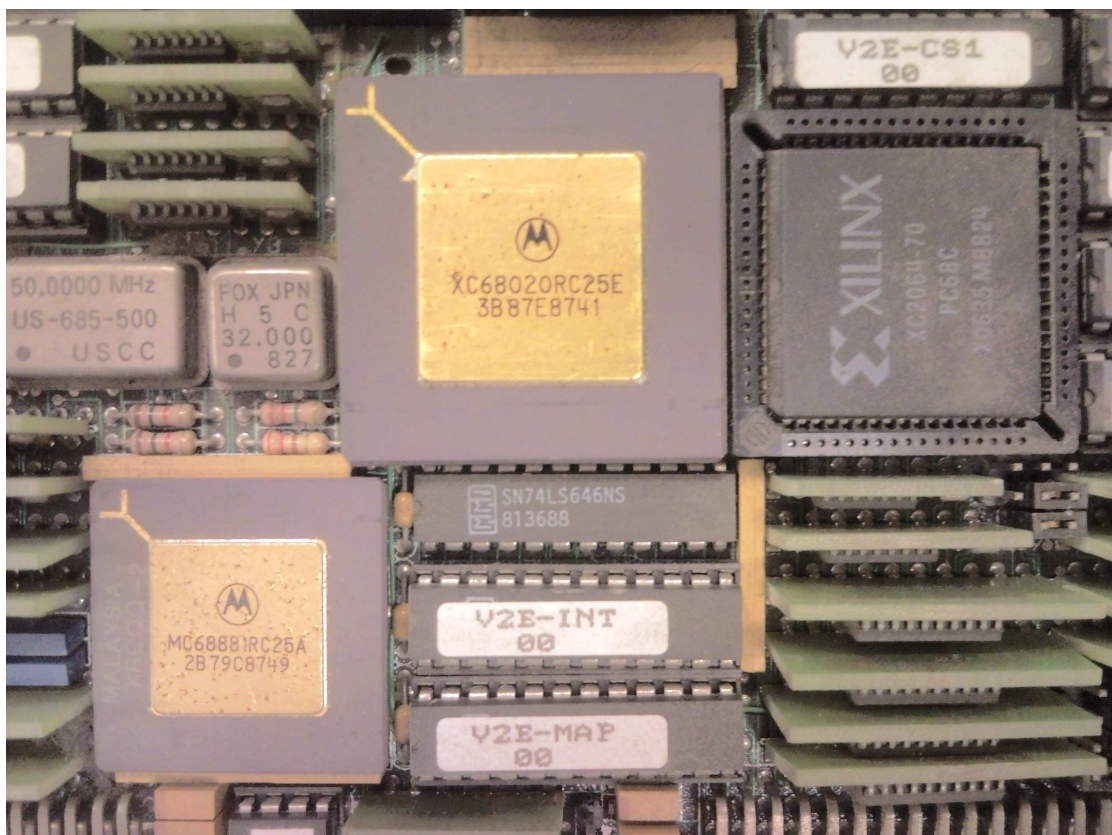


Figure 33: Heurikon HSE-10R board 5 closeup



Figure 34: Heurikon HSE-10R board 5 closeup



Figure 35: Heurikon HSE-10R board 5 rear top view

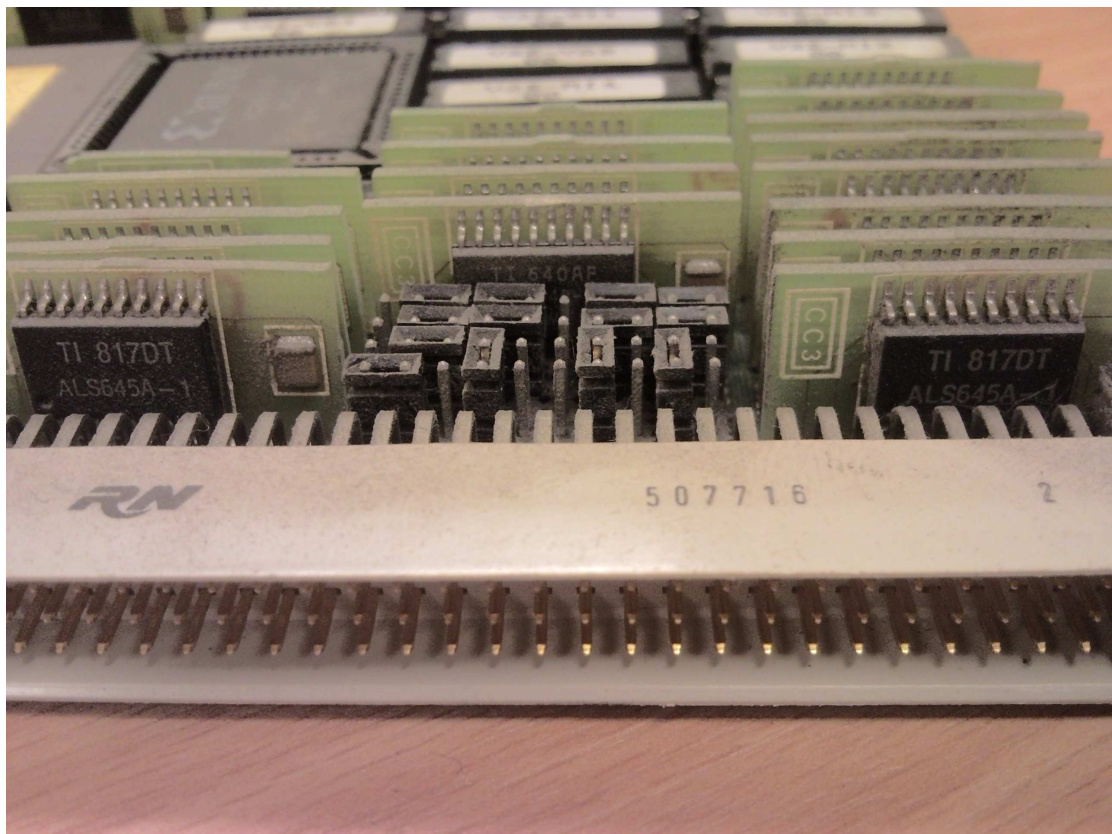


Figure 36: Heurikon HSE-10R board 5 closeup

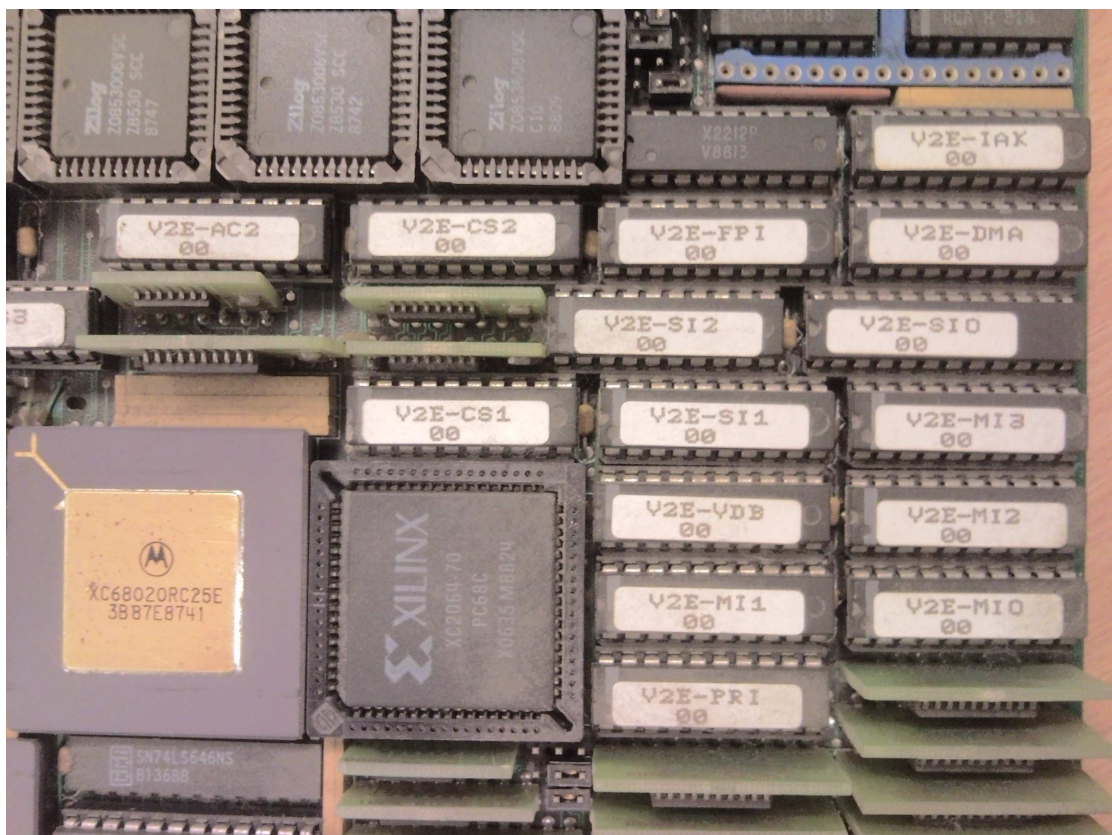


Figure 37: Heurikon HSE-10R board 5 closeup

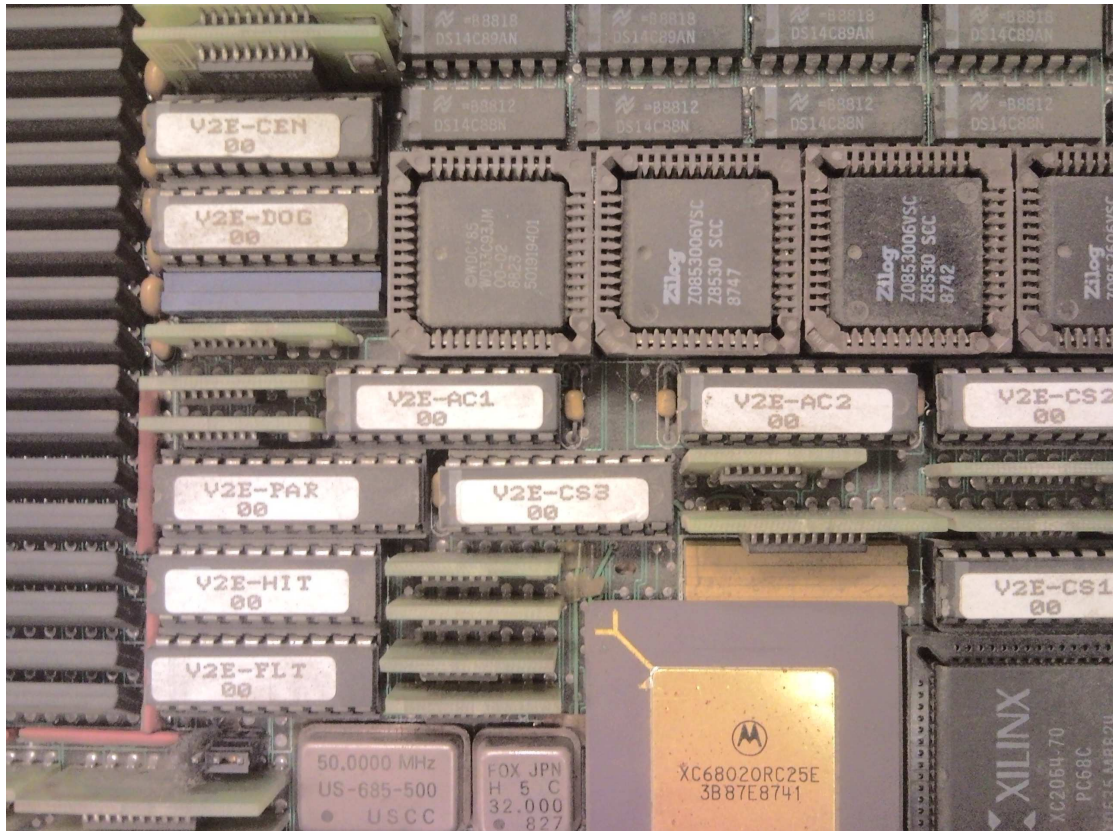


Figure 38: Heurikon HSE-10R board 5 closeup

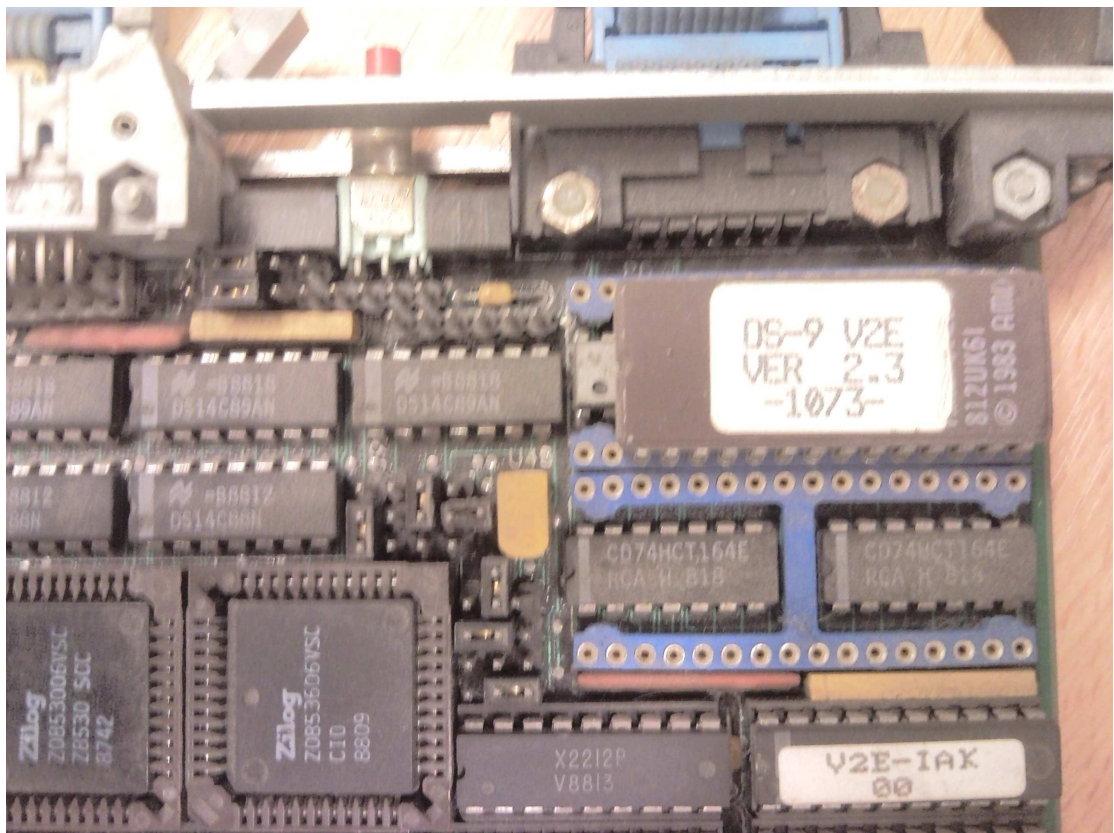


Figure 39: Heurikon HSE-10R board 5 closeup