AccessionIndex: TCD-SCSS-T.20191108.001 Accession Date: 8-Nov-2019 Accession By: Dr.Brian Coghlan and Tom Kearney Object name: DEC PDP-8/I replica front panel Vintage: c.2019 Synopsis: PiDP-8/I, modern replica of the PDP-8/I minicomputer front panel, with emulation by a Raspberry Pi.

Description:

This item is a modern replica of the PDP-8/I minicomputer front panel built from a kit of components supplied by Oscar Vermeulen in Switzerland, see [1], plus a Raspberry Pi 3 Model B+. The functions are faithfully emulated by a modified version of MIT's software simulator SimH [2] running on the Raspberry Pi mounted on the rear of the unit. The kit has proven to be popular, and as of 2022, continues to be available [3].

The PDP-8/I, introduced in 1968, is a variant of the PDP-8 [4] first introduced in 1966. The PDP-8/I was the first PDP-8 made out of standard TTL ICs.

Many thanks to Brian Coghlan and Tom Kearney for donating this item, and especially to Tom Kearney, Chief Technician of the School of Computer Science and Statistics, for building this item from the kit of components and the Raspberry Pi.

Thanks also to Tom Kearney for a video of the completed item [5].

The homepage for this catalog is at: <u>https://www.scss.tcd.ie/SCSSTreasuresCatalog/</u> Click '*Accession Index*' (1st column listed) for related folder, or '*About*' for further guidance. Some of the items below may be more properly part of other categories of this catalog, but are listed here for convenience.

Accession Index	Object with Identification
TCD-SCSS-T.20191108.001	DEC PDP-8/I replica front panel. PiDP-8/I, modern replica of
	the PDP-8/I minicomputer front panel, with emulation by a
	Raspberry Pi. c.2019.
TCD-SCSS-T.20191104.001	DEC PDP-8/e minicomputer. Legendary 12-bit minicomputer.
	c.1970.

References:

- 1. Obsolescence Guaranteed, *PiDP-8/I: RECREATING THE PDP-8/I*, see: <u>https://obsolescence.wixsite.com/obsolescence/pidp-8-overview</u> Last browsed to on 8-Nov-2019.
- simh.trailing-edge.com, Computer Simulation and History, see: <u>http://simh.trailing-edge.com/</u> <u>https://en.wikipedia.org/wiki/SIMH</u> Last browsed to on 8-Nov-2019.

- 3. Tindie, *PDP-8 replica kit: the PiDP-8*, see: <u>https://www.tindie.com/products/obso/pdp-8-replica-kit-the-pidp-8/</u> Last browsed to on 25-Aug-2022.
- 4. Wikipedia, *PDP-8*, see: <u>https://en.wikipedia.org/wiki/PDP-8</u> Last browsed to on 30-Aug-2017.
- 5. Tom Kearney, *PiDP-8 video*, see: https://www.scss.tcd.ie/SCSSTreasuresCatalog/hardware/TCD-SCSS-T.20191108.001/TCD-SCSS-T.20191108.001-vid01.mp4 Last browsed to on 26-Aug-2022.



Figure 1: PiDP-8/I kit of components

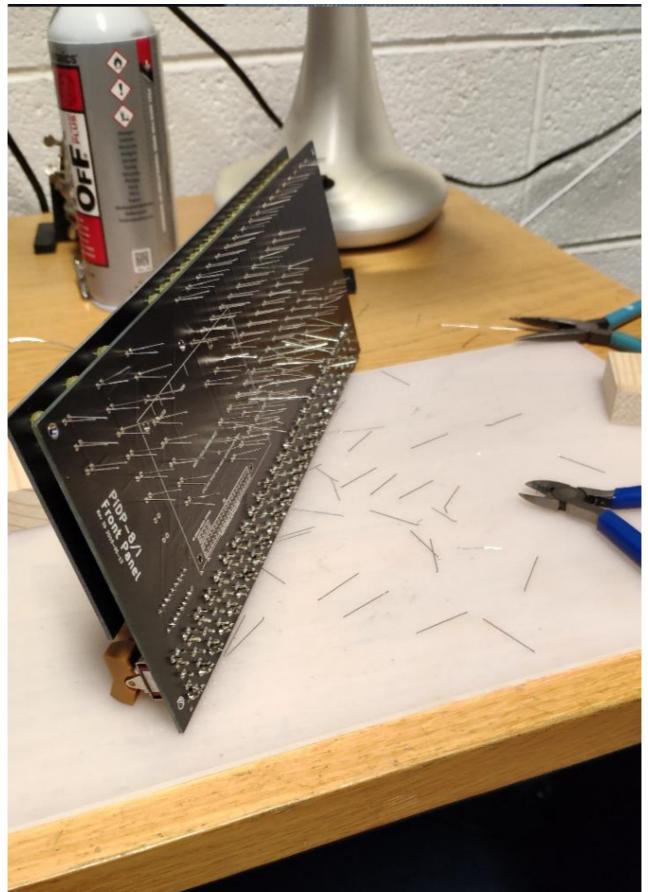


Figure 2: PiDP-8/I rear three-quarter view during assembly



Figure 3: PiDP-8/I front three-quarter view during assembly

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Figure 4: PiDP-8/I front view, assembled