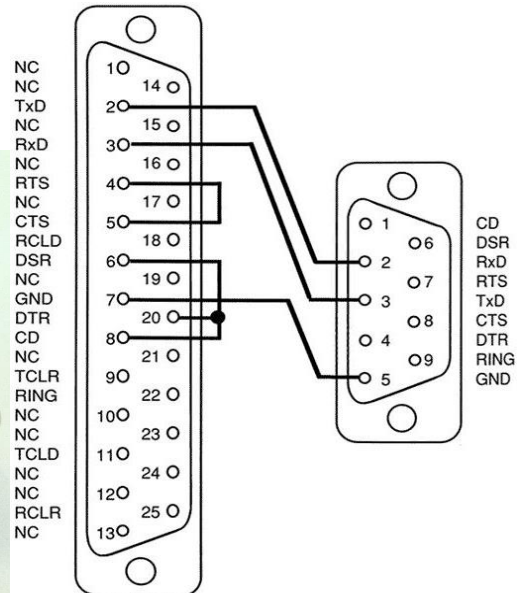
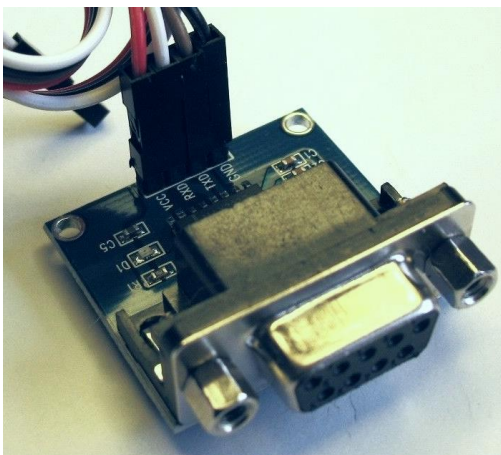


Using a Raspberry PI as CP/M server for a Mupid BTX

1. Install a serial interface on the Raspberry and configure it for 4800 Baud.



Create the directory `serial-getty@ttyAMA0.service.d` in `/etc/systemd/system/` and prepare the file `override.conf`:

```
[Service]
ExecStart=
ExecStart=/sbin/agetty -a cpm -L -n ttyAMA0 4800 vt100
```

2. Create the user CPM (without password), enable sudo for the user. In `/etc/passwd` you should see:
`cbm::1001:1001::/home/cpm:/bin/bash`
3. Download YAZE from <http://www.mathematik.uni-ulm.de/users/ag/yaze-ag/>. Remove the control characters in the startup message in `yaze.c` (at the start of the main procedure). Compile YAZE with `make -f Makefile_Raspberry_Pi_1` and install everything by calling `make --f Makefile_Raspberry_Pi_1 install`.

It also makes sense to install an optimized CLS file in the CP/M emulator (printing 25 empty lines instead of using control sequences to clear the screen). You may also add MBASIC.COM to your emulated drive A: (start CP/M and type `R cls.z80` and `R mbasic.com`).

4. Install the 80 character & vt100 setup file for the Mupid. Create an optimized yaze.sh file to start in CP/M 2.2 mode (`exec ./yaze_bin -l -l -b yaze.boot $*`).

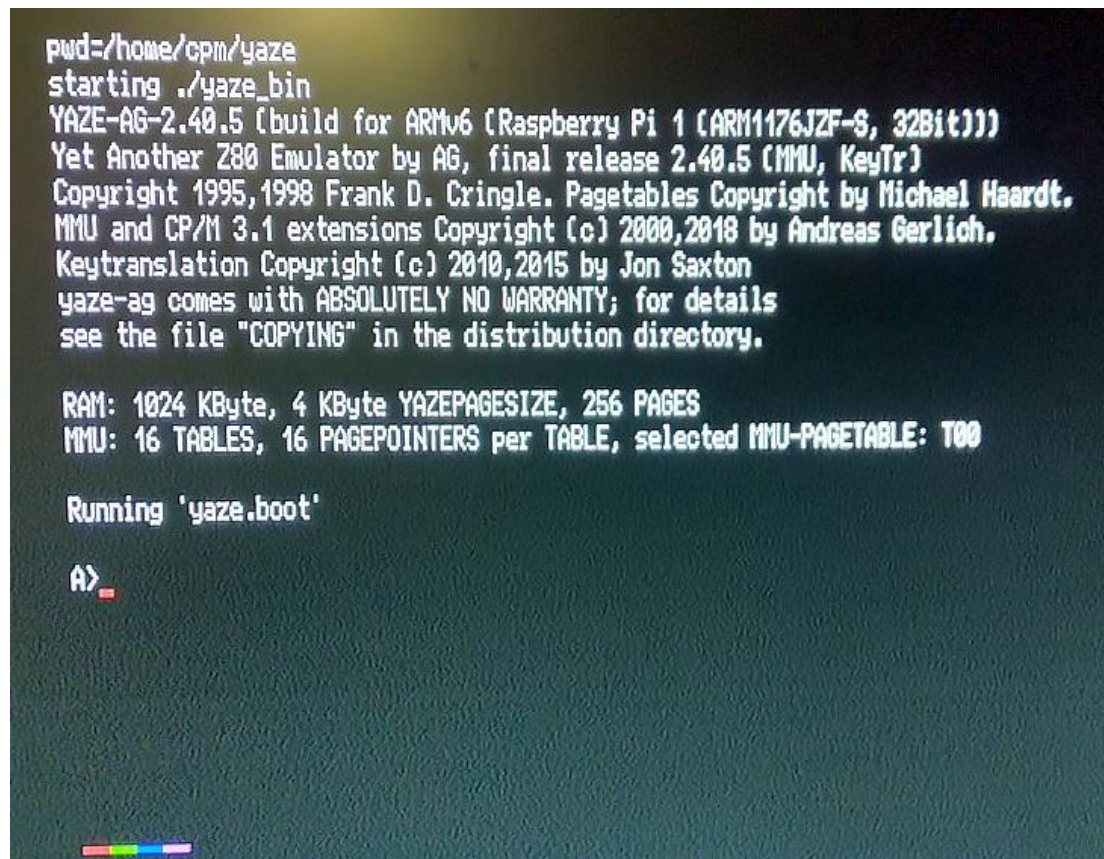
5. Edit `.bashrc` to automatically start CP/M:

```
case $- in
    *i*) ;;
    *) return;;
esac
```

```
cat /home/cpm/80Z
/home/cpm/yaze.sh
sudo shutdown -h now
```

6. Reboot the Raspberry and connect the Mupid by pressing:

```
<K> C 5
<K> A
<Shift><Connect>
```

A screenshot of a terminal window with a dark background and light-colored text. The text shows the execution of the yaze_bin script, which starts the YAZE-AG emulator. It displays version information (2.40.5), build details (ARMv6, Raspberry Pi 1), and copyright notices for Frank D. Cringle, Michael Haardt, and Jon Saxton. It also shows system configuration: 1024 KByte RAM, 4 KByte YAZEPAGESIZE, 256 PAGES, and 16 MMU tables. The prompt 'A>' is visible at the bottom.

```
pwd=/home/cpm/yaze
starting ./yaze_bin
YAZE-AG-2.40.5 (build for ARMv6 (Raspberry Pi 1 (ARM1176JZF-S, 32Bit)))
Yet Another Z80 Emulator by AG, final release 2.40.5 (MMU, KeyTr)
Copyright 1995,1998 Frank D. Cringle. Pagetables Copyright by Michael Haardt.
MMU and CP/M 3.1 extensions Copyright (c) 2000,2018 by Andreas Gerlich.
Keytranslation Copyright (c) 2010,2015 by Jon Saxton
yaze-ag comes with ABSOLUTELY NO WARRANTY; for details
see the file "COPYING" in the distribution directory.

RAM: 1024 KByte, 4 KByte YAZEPAGESIZE, 256 PAGES
MMU: 16 TABLES, 16 PAGEPOINTERS per TABLE, selected MMU-PAGETABLE: T00

Running 'yaze.boot'

A>
```

7. Exit the CP/M emulator and shutdown the Raspberry by calling `E` within CP/M.