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MatrixClock

Simple LED matrix alarmclock with temperature measuring

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Project overview

This project is a simple LED matrix clock. It can use either MAX7219 as LED drivers (one IC per matrix) either HT1632 LED driver. It's possible to use 3 or 4 matrixes, but recent code is more suitable for second option.

Matrixclock - Led matrix clock



Main features:

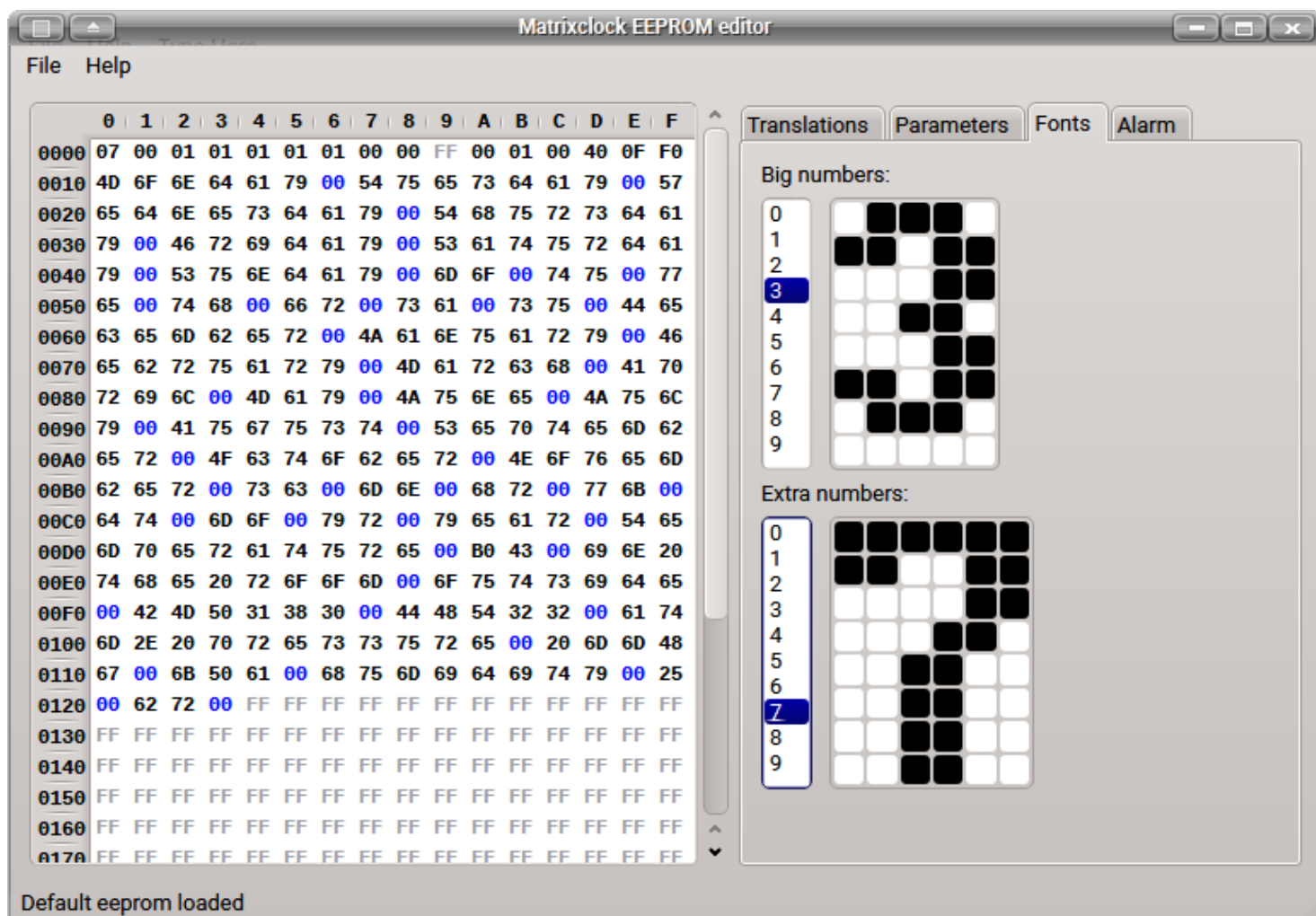
- RTC DS1307 support (DS3231 also works)
- One alarm which can be enabled for any day of week
- Active beeper is used for alarm and signals
- Temperature measurement with DS18B20 sensors
- Pressure/temperature measurement with BMP180 sensor
- Humidity/temperature measurement with DHT22 sensor
- Scrolling date and sensors data strings
- Reducing brightness in darkness

Supported LED drivers:

- MAX7219 (one per LED matrix). Pinout and schematic are [here](#)
- HT1632 (one for 4 matrixes). Pinout for [JY-MCU 3208CLOCK PRO](#) module

Matrixclock EEPROM editor

While project uses various parameters from EEPROM memory special desktop application to edit eeprom matrixclock_xx.bin was designed. It allows to load, modify and save eeprom binary file in easy way.



Matrixclock editor is written on Qt5 and it's sources are available on [Github](#).

Useful links:

- [First article about project](#) (in Russian)
- [Forum thread](#) (in Russian)

MatrixClock project is maintained by [WiseLord](#)