Mea Vox

Have your Arduino speak French, the vintage way.

Mea Vox is a formant synthesizer add-on board with a French accent.
It is developed around the MEA8000 speech chip that was used in Apple II, Thomson TO8, MO5, and Amstrad CPC during the mid ’80.

https://www.youtube.com/watch?v=krkwwyT5UFo

The hardware is compatible with the mikroBUS™ standard, allowing rapid prototyping and easy integration into existing projects.

The onboard class-d amplifier can drive a small 8 ohms speaker.

Specifications

Applications

This vox board was designed to be used with EMY and it’s appropriate firmware. (in this case, the audio signal is forwarded via the “PWM” pin – the jack is not used with Emy)

It can also be used in robots, toys or any other retrocomputing speaking devices you may think of.

Thanks to the popular mikroBUS™, this board can be instantly connected to multiple different platforms like the Arduino or the Clicker2.

The onboard amplifier is quite powerful and is just waiting for the speaker to be plugged in!

Breadboard Connection



Github

This board is developed under the creative commons license: CC-BY-SA
The schematic and the code are available here

Text to Speech

The chip can string phoneme to produce quite realistic speech (although with a French accent). It can also sustain notes for a nice singing effect. Here is how the Arduino code looks like :
-AMAZONPOLLY-ONLYWORDS-START-

```
dire("/bonj+w_r");
delay(400);
dire("&l&kt€Ronik miwzik");
delay(400);
dire("i$ b+i-n  ka+I+n -ma/$=+_ine");
delay(400);
dire("+?je pE ossi murmur*?");
delay(400);
dire("je suis un arduino qui parle"); // à reformater ;-)
delay(400);
```

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Please check the Soundcloud demo at the end of this page to hear how it sounds.
You will find more information about the various phonemes and the prosodic markers in the following manual.
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User Manual

https://docs.google.com/document/d/1T_MoF0fYU78WSstgAe__kCrAFt3FV_OaJf1L8y2XLO4/edit?usp=sharing

Media



View this post on Instagram

A post shared by Jean-Luc Deladrière (@polaxis)

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Soundclound

mikroBUS™ standard designed by MikroElektonika

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