

# MIDIbox 3396



***Project on Early Akpha Design Stage***



This is a page for collecting ideas on how to build a synth based on the Curtis Electromusic Specialties CEM3396 IC chip, controlled via PIC of course. This chip is for example used in the Oberheim Matrix-1000 synth. It is out of production, but can be found at [ebay](#) from time to time.

## Data Sheet of CEM3396

First please take a look at the [CEM3396 datasheet](#).

## Additional info, a readily available source of CEM 3396 chips:

Try contacting marcus at: [cheetahrepairs@lycos.co.uk](mailto:cheetahrepairs@lycos.co.uk) The CEM3396 is £6.50 each or a complete set of 6 for £32.00.

One of the guys active here dealt with him whilst repairing one of his two matrix 1000's. He says: "This is an excellent sounding chip & would benefit highly from the Thorsten Treatment :)"

## CEM 3396 contacts of interest, working on firmware for the Cheetah MS6, a Matrix clone:

See: <http://www.maad.net/ms6/index.html> Contact: [kristofer@maad.net](mailto:kristofer@maad.net)

This guy has patched up the firmware of an old Oberheim Matrix 1000 clone by Cheetah, known as the MS6, to work properly ...amongst other things. He also is in the process of rewriting a firmware for the module from scratch; and may have already made some progress... This might be someone worth talking to on furthering the MIOS effort to utilise the CEM3396; he could have plenty of insight to offer. He's selling CEM3396's on his webshop too.

Here's another guy who's hacked the firmware... <http://www.butoba.net/homepage/ms6.html>

And one final place that has a handful of CEM3396's: <http://www.synthtech.com/cems.html>

## Project - Turning a Oberheim Matrix 1000 / cem3396's into a multimode Xpander

Artesia has done the groundwork for the hardware nessessary to turn a humble CEM3396 chip into a

multimode filtered monster, like the Xpander & Matrix 12. Sofar, he has created a beta version PCB layout to facilitate this, however if this project is to happen sooner rather than later, volunteers for making the code happen are needed. Otherwise, it's where and when he gets the time himself to do anything further with it.

There is a discussion on the forum with some nice pictures, see here:

<http://www.midibox.org/forum/index.php/topic,13770.0.html>

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