

# ILKYMIST ONE

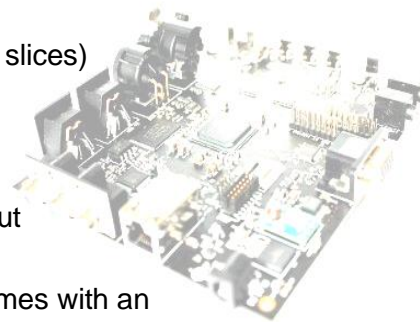


## HIGHLIGHTS

- Designed by the open source Milkymist community founded by Sébastien Bourdeauducq, and manufactured by Sharism at Work Ltd.
- All board design files (Altium, schematics...) released under CC BY-SA 3.0 Unported
- 100% GPLv3 WISHBONE-compliant SoC with graphics acceleration. It intends to compete with proprietary solutions, eg. TI's OMAP, Freescale i.MX, ...
- Soft-core CPU : LatticeMico32, runs Linux 3.0-nommu, uCLinux and RTEMS
- Ongoing effort to develop a GPLv3 alternative to Xilinx's ISE (in particular place and route), see <http://www.milkymist.org/fpgatools/>
- Milkymist One was originally developed for VJ'ing. In addition it's also a nice platform for robotics and experimenting with new&original hardware/software combinations.

## HARDWARE SPECIFICATIONS

- Based on a Spartan 6 (XC6SLX45 with 43,661 logic cells and 6,822 slices)
- 128MB DDR, 32MB parallel flash and memory card slot
- Ethernet 10/100 Mb, two USB ports (host) and one IR receiver
- RGB and VGA output, 24bpp, up to 140 MHz
- MIDI IN & MIDI OUT, plus two DMX512 ports and AC'97 audio in&out
- JTAG + serial (through FT2232H), with on-chip GDB server
- Analog video input. Note: boxed version sold through sharism.cc comes with an additional camera compatible with the Milkymist SoC
- 5W power consumption



## INTERESTED IN JOINING THE PROJECT? A FEW POINTERS:

- Wiki: <http://www.milkymist.org/wiki/>
- Mailing list: <http://lists.milkymist.org/listinfo.cgi/devel-milkymist.org>
- Blog: <http://lekernel.net/blog/category/milkymist/>
- Source code: <https://github.com/milkymist/>
- Where to buy it: <http://sharism.cc/>
- Presentation at CCC 2011:  
<http://events.ccc.de/camp/2011/Fahrplan/events/4412.en.html>
- Technical description of the SoC: <http://milkymist.org/mmsoc.html>
- A cool demonstration of Milkymist and TouchOSC by Xiangfu Liu:  
<http://www.youtube.com/watch?v=cHp6qVOV2-E>