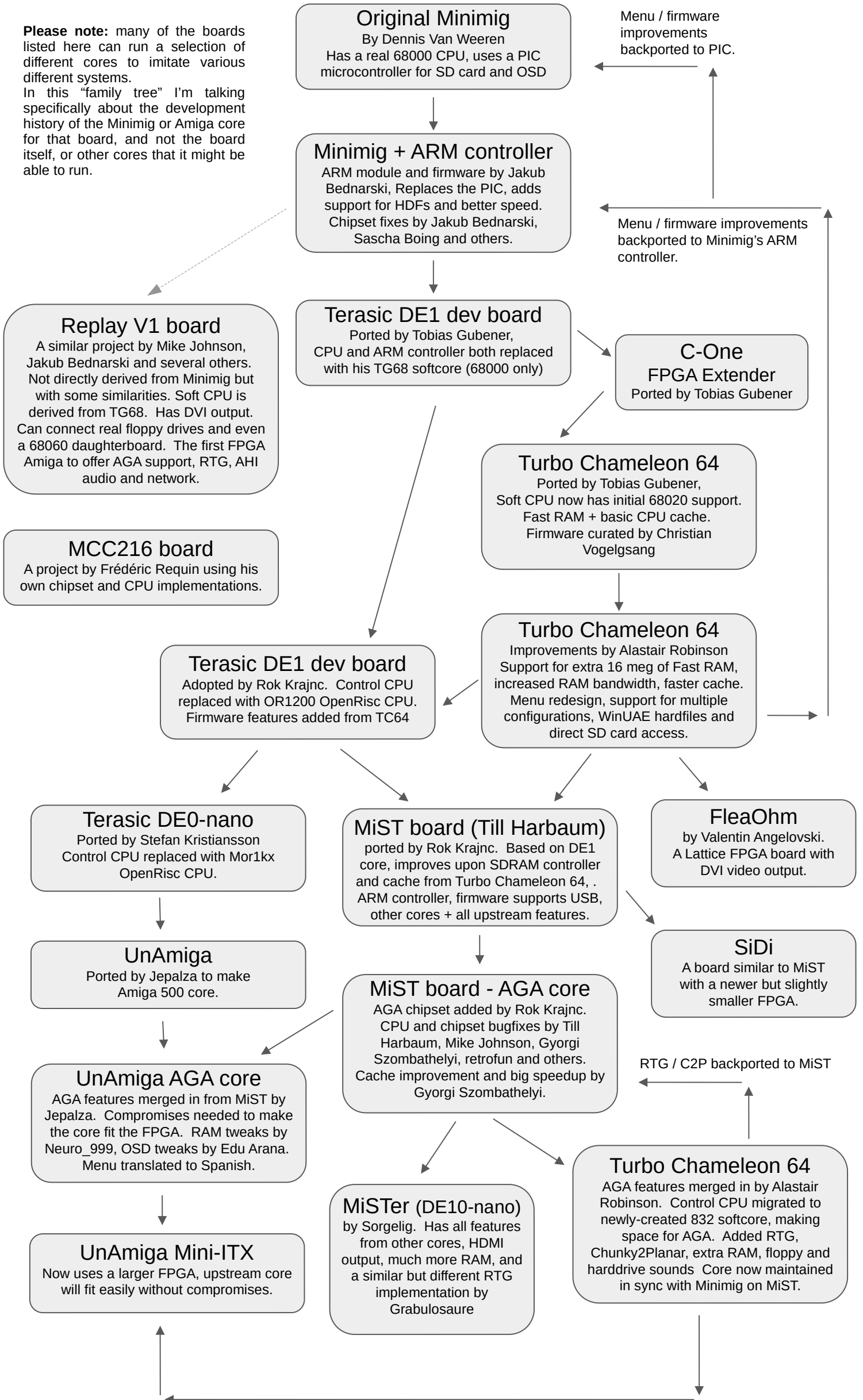


# Minimig "Family Tree"

**Please note:** many of the boards listed here can run a selection of different cores to imitate various different systems. In this "family tree" I'm talking specifically about the development history of the Minimig or Amiga core for that board, and not the board itself, or other cores that it might be able to run.



**Original Minimig**  
By Dennis Van Weeren  
Has a real 68000 CPU, uses a PIC microcontroller for SD card and OSD

**Minimig + ARM controller**  
ARM module and firmware by Jakub Bednarski, Replaces the PIC, adds support for HDFs and better speed. Chipset fixes by Jakub Bednarski, Sascha Boing and others.

**Terasic DE1 dev board**  
Ported by Tobias Gubener, CPU and ARM controller both replaced with his TG68 softcore (68000 only)

Menu / firmware improvements backported to PIC.

Menu / firmware improvements backported to Minimig's ARM controller.

**Replay V1 board**  
A similar project by Mike Johnson, Jakub Bednarski and several others. Not directly derived from Minimig but with some similarities. Soft CPU is derived from TG68. Has DVI output. Can connect real floppy drives and even a 68060 daughterboard. The first FPGA Amiga to offer AGA support, RTG, AHI audio and network.

**MCC216 board**  
A project by Frédéric Requin using his own chipset and CPU implementations.

**C-One  
FPGA Extender**  
Ported by Tobias Gubener

**Turbo Chameleon 64**  
Ported by Tobias Gubener, Soft CPU now has initial 68020 support. Fast RAM + basic CPU cache. Firmware curated by Christian Vogelgsang

**Terasic DE1 dev board**  
Adopted by Rok Krajnc. Control CPU replaced with OR1200 OpenRisc CPU. Firmware features added from TC64

**Turbo Chameleon 64**  
Improvements by Alastair Robinson Support for extra 16 meg of Fast RAM, increased RAM bandwidth, faster cache. Menu redesign, support for multiple configurations, WinUAE hardfiles and direct SD card access.

**Terasic DE0-nano**  
Ported by Stefan Kristiansson Control CPU replaced with Mor1kx OpenRisc CPU.

**MiST board (Till Harbaum)**  
ported by Rok Krajnc. Based on DE1 core, improves upon SDRAM controller and cache from Turbo Chameleon 64, . ARM controller, firmware supports USB, other cores + all upstream features.

**FleaOhm**  
by Valentin Angelovski. A Lattice FPGA board with DVI video output.

**UnAmiga**  
Ported by Jepalza to make Amiga 500 core.

**SiDi**  
A board similar to MiST with a newer but slightly smaller FPGA.

**UnAmiga AGA core**  
AGA features merged in from MiST by Jepalza. Compromises needed to make the core fit the FPGA. RAM tweaks by Neuro\_999, OSD tweaks by Edu Arana. Menu translated to Spanish.

**MiST board - AGA core**  
AGA chipset added by Rok Krajnc. CPU and chipset bugfixes by Till Harbaum, Mike Johnson, Gyorgi Szombathelyi, retrofun and others. Cache improvement and big speedup by Gyorgi Szombathelyi.

RTG / C2P backported to MiST

**UnAmiga Mini-ITX**  
Now uses a larger FPGA, upstream core will fit easily without compromises.

**MiSTer (DE10-nano)**  
by Sorgelig. Has all features from other cores, HDMI output, much more RAM, and a similar but different RTG implementation by Grabulosaure

**Turbo Chameleon 64**  
AGA features merged in by Alastair Robinson. Control CPU migrated to newly-created 832 softcore, making space for AGA. Added RTG, Chunky2Planar, extra RAM, floppy and harddrive sounds Core now maintained in sync with Minimig on MiST.