Helios4 is the perfect recipe of high speed interfaces to build a real NAS.
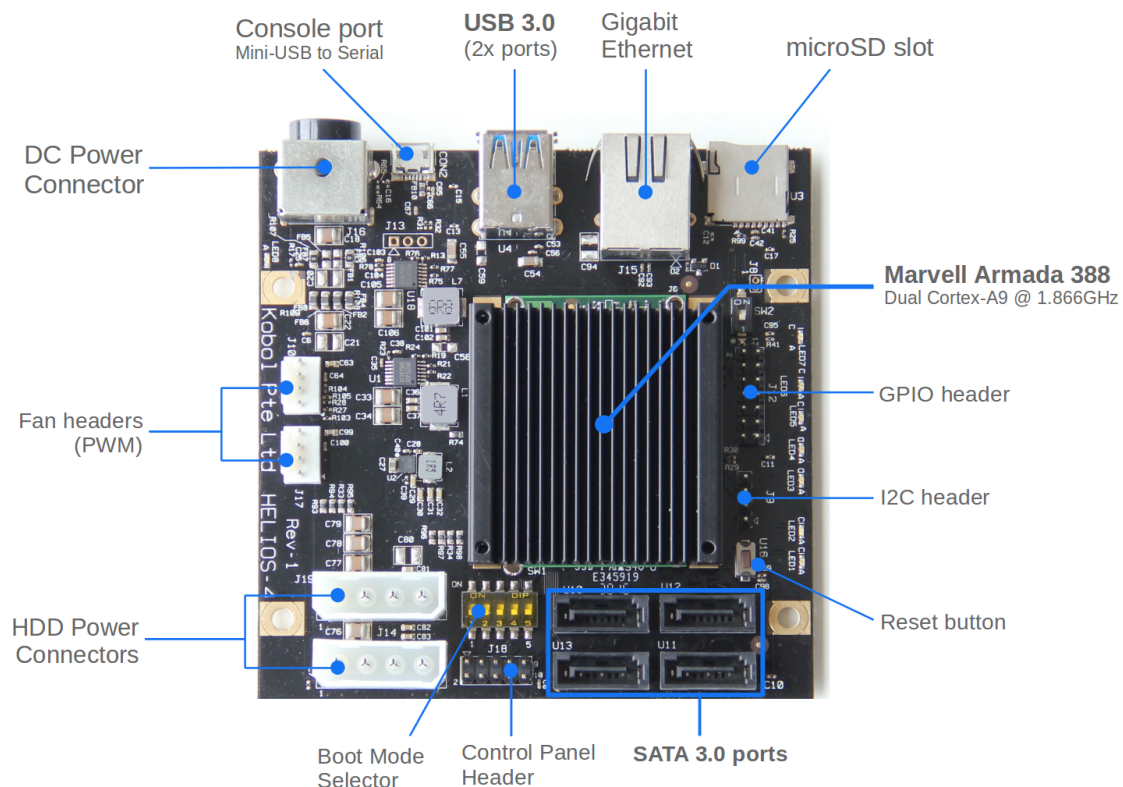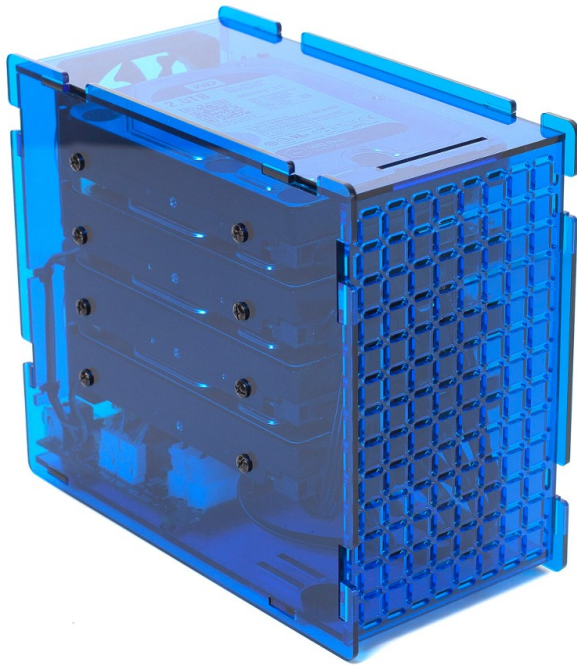
The Marvell ARMADA® 388 is a robust energy-efficient System on Chip (SoC) with very powerful processing abilities especially suited for headless data processing, networking and storage. This Dual-core ARM Cortex-A9 CPU clocked at 1.866 Ghz integrates a Cryptographic and XOR DMA engines to provides the best level of performance for NAS functionality.

Helios4 is the only ARM based board on the market that offers 4x SATA 3.0 ports. This is the key feature that makes this platform the first single board computer specially designed for Network Attached Storage. Enjoy up to 40TB of storage (4x Disk of 10TB) while insuring enough throughput to share your data across your entire home or small office network.

Console port
Mini-USB to Serial

USB 3.0
(2x ports)

Gigabit
Ethernet

microSD slot

DC Power
Connector

Marvell Armada 388
Dual Cortex-A9 @ 1.866GHz

GPIO header

I2C header

Fan headers
(PWM)

Reset button

HDD Power
Connectors

Boot Mode
Selector

Control Panel
Header

SATA 3.0 ports

Hardware Specifications

CPU

CPU Model	Marvell Armada 388 (88F6228) ARM Cortex-A9
CPU Architecture	ARMv7 32-bit
CPU Frequency	Dual Core 1,866GHz
Additional Features	- RAID Acceleration Engines - Security Acceleration Engines - Advanced Power Management

Memory

System Memory	2 GB DDR3L ECC

HDD Interfaces

SATA 3.0 Ports	4
Max Capacity	40 TB (10 TB HDD x 4)

External Interfaces

RJ-45 1GbE LAN Port	1
USB 3.0	2
microSD (SDIO 3.0)	1

Developer Interfaces

GPIO	12
I2C	1
UART	1 (via onboard Micro-USB converter)

Appareance

Board Dimension	100mm x 100mm
Casing Dimention (H x W x D)	182 mm x 107 mm x 210 mm
Casing Material	Colored PMMA

Others

Boot Mode Selector	- SPI - SD/eMMC - UART - SATA
SPI NOR Flash	32Mbit onboard
PWM FAN	2 (70 mm x 70 mm)
LED	8 LED (7x Green, 1x Red) controlled by GPIO
Control Panel	1 (optional)
DC Connector	Kycon 4-pin Snap & Lock (PN: KPJX-4S-S)
AC/DC Adapter	Input: 100-240VAC 50/60Hz Ouput: DC12V 8.0A

Packaging

Content	- Helios4 Board - Casing - 70mm PWM ball bearing FAN (2x) - SATA Data Cable (4x) - Moles to dual SATA Power Cable (2x) - Assembliy kit - AC Adapter - AC Plug (EU, UK or US)
Weight	Full Kit : 1.5 Kg

helios

armbian
universal operating system

openmediavault
The open network attached storage solution

SYNCLOUD

Software

Operating System: Linux (Debian / Armbian).

Kernel Version: 4.9

Software Partners:

Armbian - Debian and Ubuntu for ARM board.

OpenMediaVault - Linux NAS turn-key solution.

Syncloud - Cloud services at your premises.

helios4