

Elphel – Open Hardware & Free Software Reconfigurable Network Cameras

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CCC Camp 2011, Berlin

Hardware: NC353L

Tech specs:

5 Megapixel CMOS Sensor

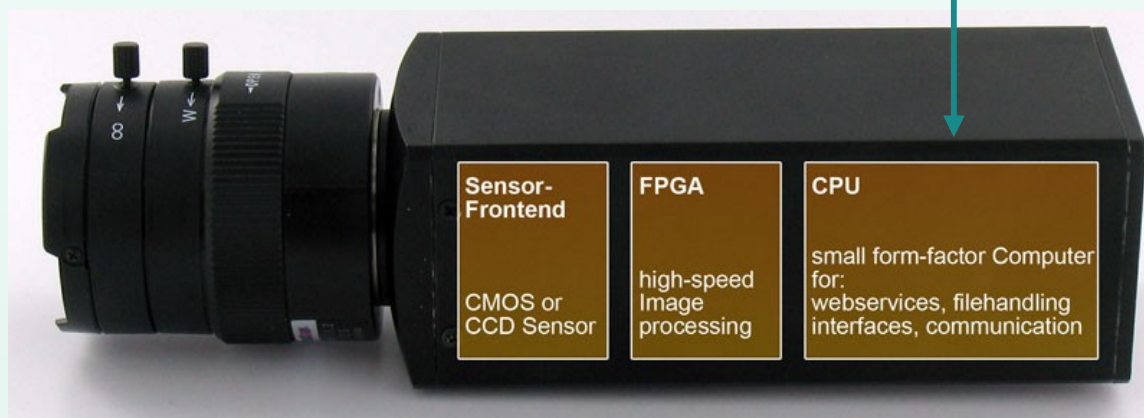
Exchangeable Lens (c-mount)

75 Megapixels/second Throughput

FPGA with Image pipeline

Embedded Linux computer

(webserver, Ethernet, USB, SATA connections)



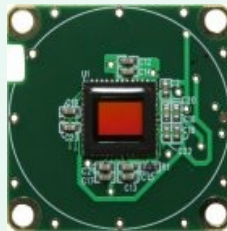
Boards Overview



10353 System Board



10369 IO Board

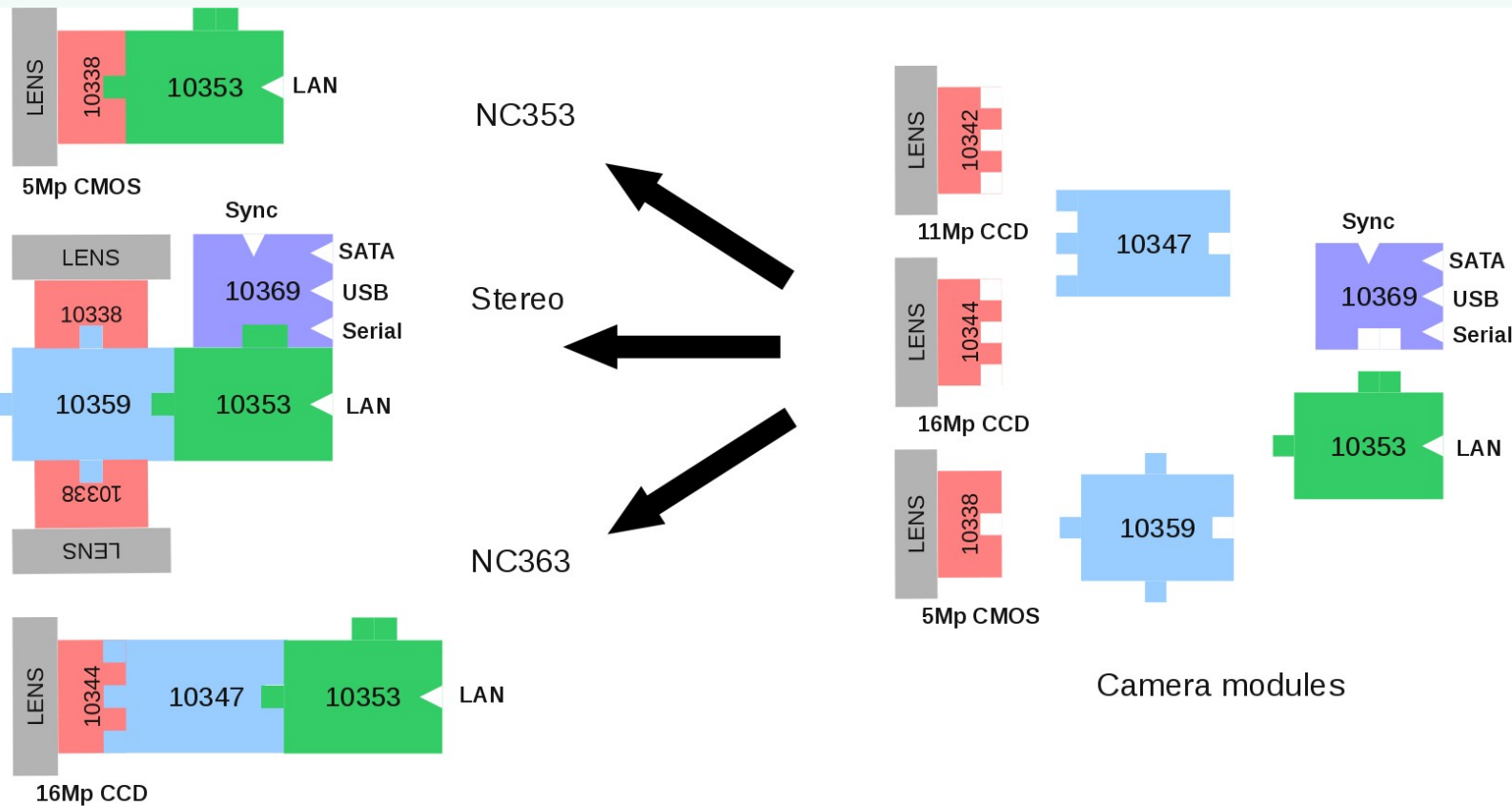


10338 Sensor Board



10359 Multi Sensor Board

Camera Building Blocks





Basic camera NC353



Stereo



GEO



HDD

Camera is reconfigurable and user/developer friendly.
Controlled through a web-based user interface.

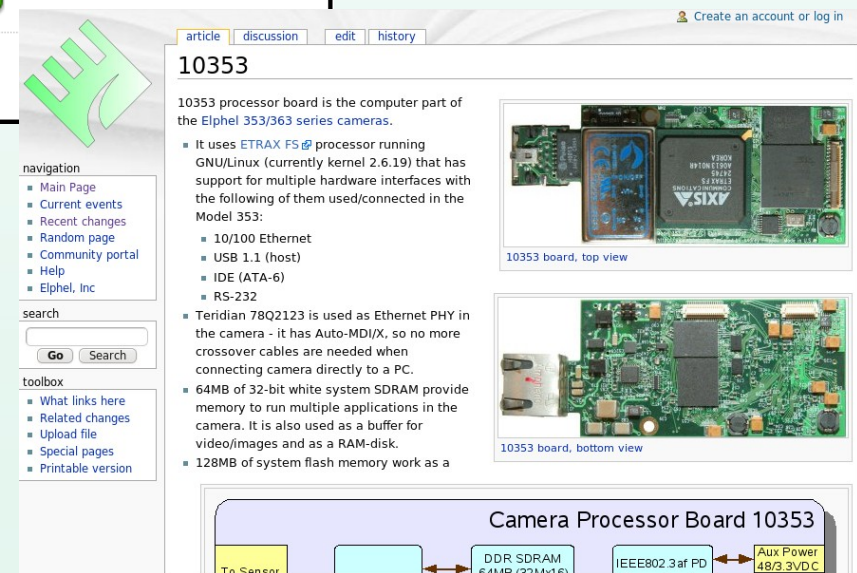
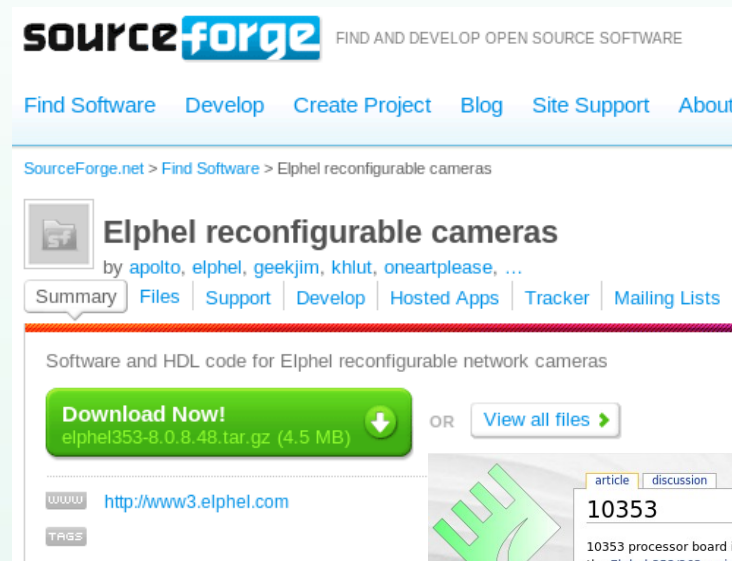
- HTML, JavaScript, PHP
- C, C++
- Verilog HDL

`/* source is inside */`



- Code is on the
SourceForge.net

- Schematics, PCB layout &
Documentation are available on
wiki.elphel.com



Licenses:

- *GNU GPL V3*
- *GNU Free Documentation License V1.3*

Applications: Panoramic Imaging



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Google Street View

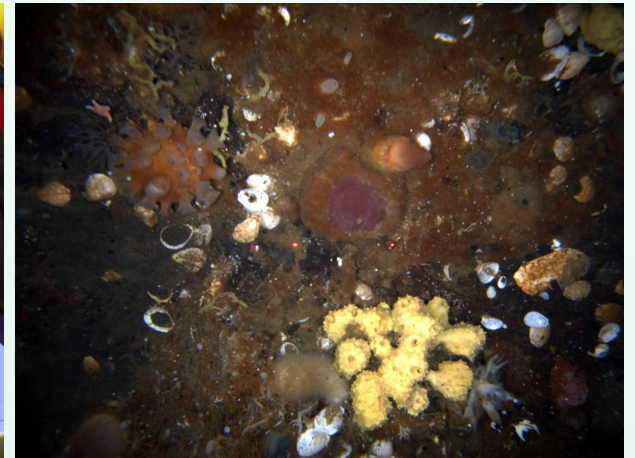
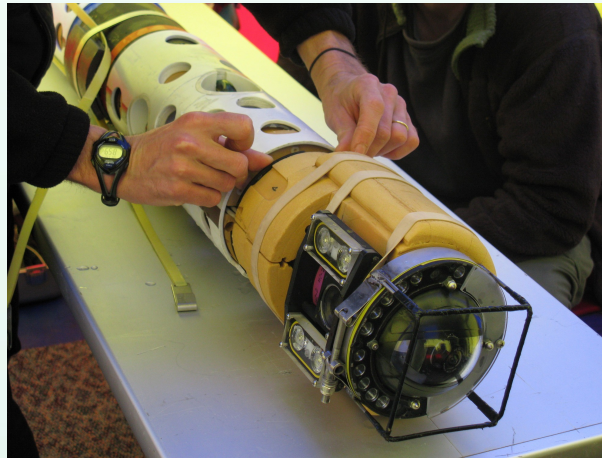
From Wikipedia, the free encyclopedia
(Redirected from [Streetview](#))



This article **may need to be updated**. Please update this article to reflect the [talk page](#) for more information.

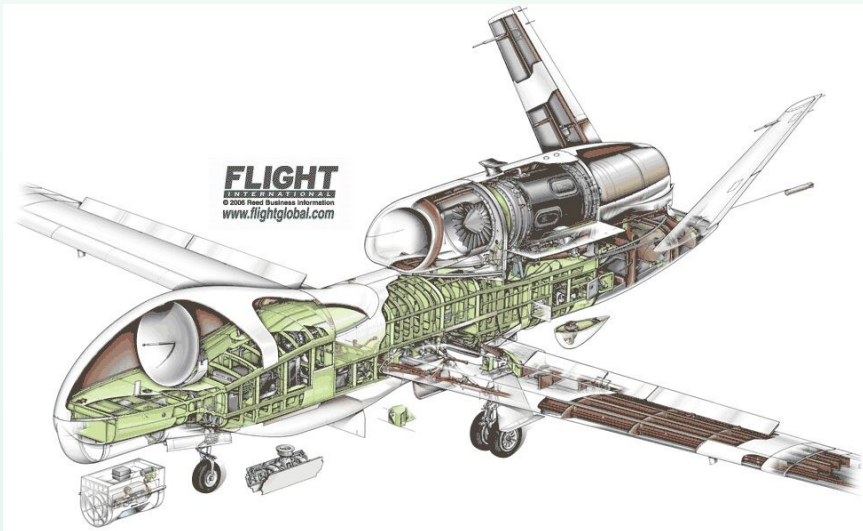
Google Street View is a technology featured in [Google Maps](#) and [Google Earth](#) that provides [panoramic](#) views on May 25, 2007, originally only in several cities in the United States, and has since gradually expanded to include the rest of the world. Google Street View displays images taken from a fleet of specially adapted cars. Areas not accessible by car, like some mountains, are sometimes covered by *Google Trikes* ([tricycles](#)) or a [snowmobile](#).^[2] On each of these vehicles there are nine directional cameras for positioning and three laser range scanners for the measuring of up to 50 meters 180° in the front of the vehicle. and Wi-Fi [hotspots](#).^[3] Recently, 'high quality' images are based on open source hardware cameras from Elphel.

Applications: SCINI - Antarctic Underwater Exploration Robot

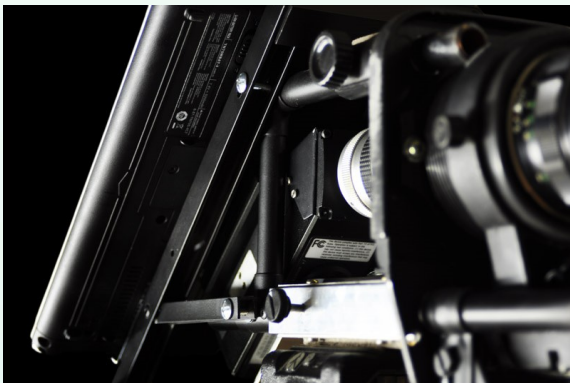


Moss Landing Marine Lab

Applications: NASA Global Hawk UAV Aerial Near Space Exploration



Applications: Apertus - Open Source Cinema Project



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