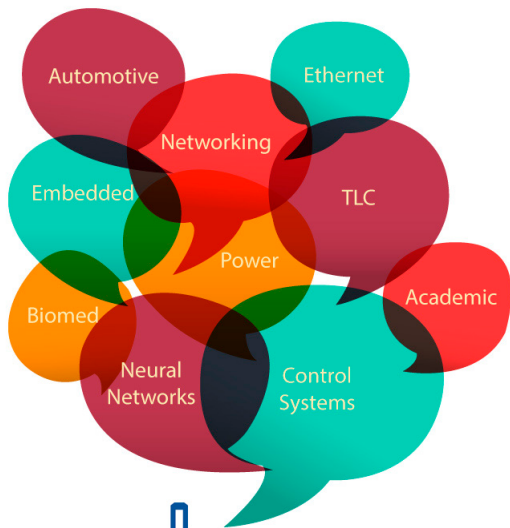


QuickView

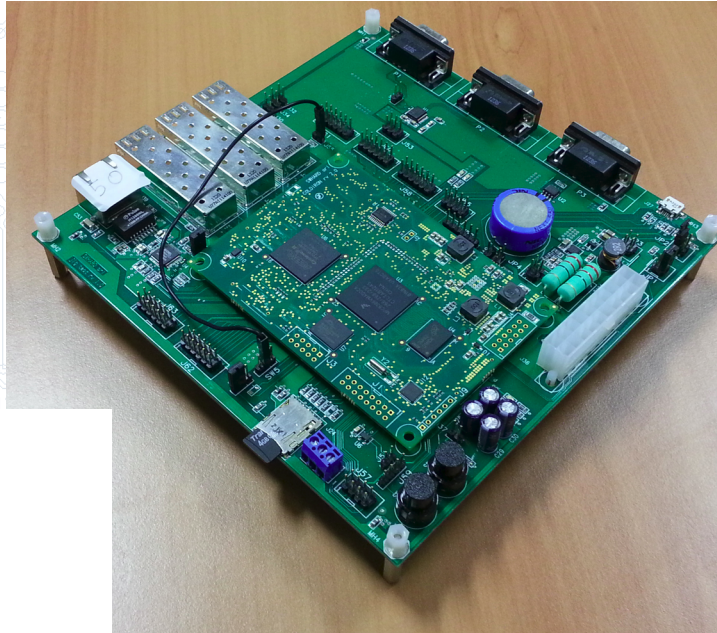
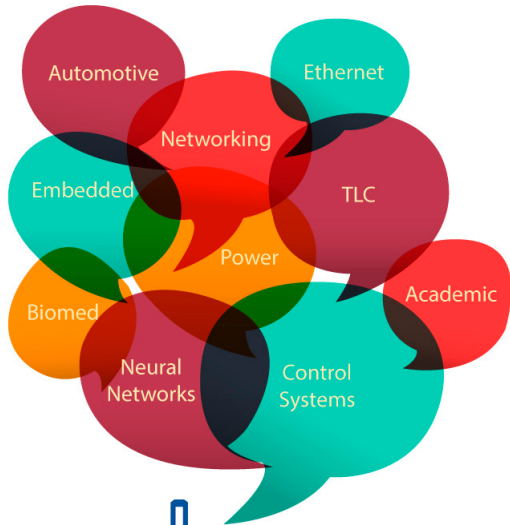
Overview

Software



Overview

Software

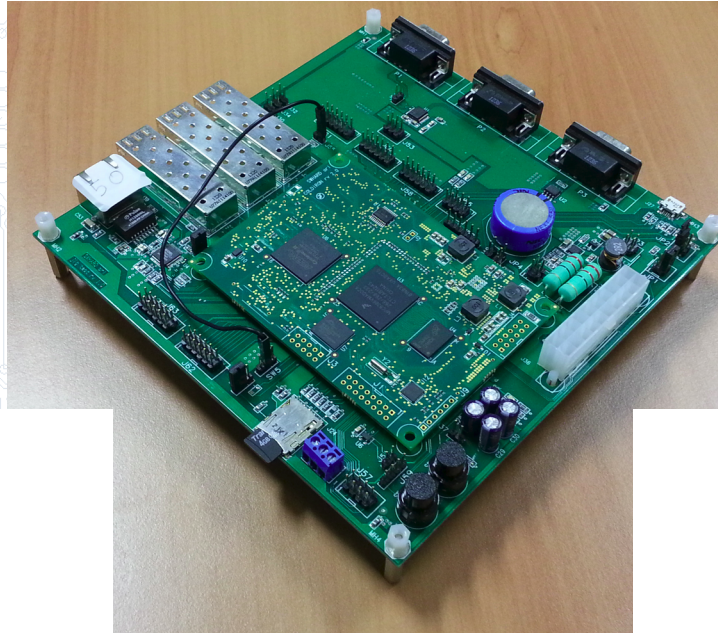
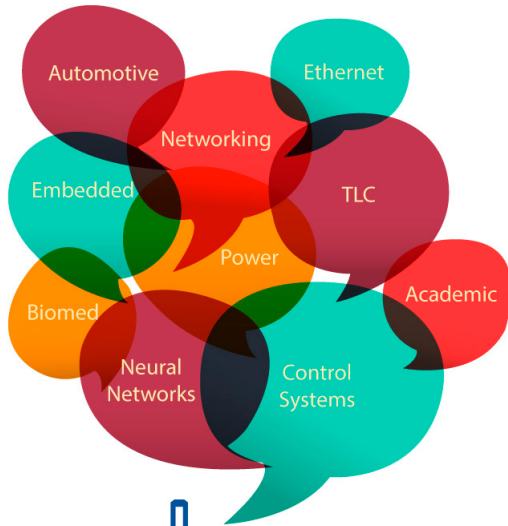


Hardware



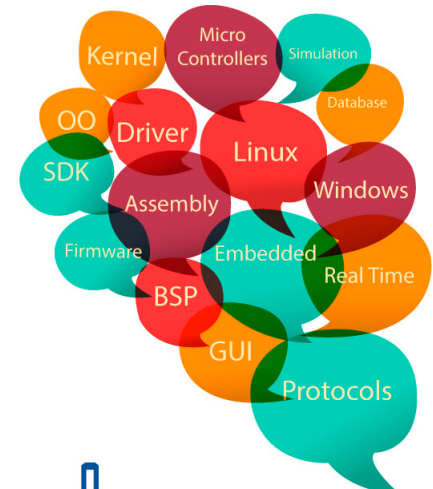
Overview

Software



R&D

Hardware



Overview

- **SWHARD** stands for **SoftWare, HARDware, R&D**
- **SWHARD mission** is to grant research, innovation & development services
- **SWHARD** is an italian innovative startup.
 - Founded in 2012 as an s.r.l.
 - Early activities since Jul 2011
 - Fully operational in Jan 2014
 - 2015: With DIMEC-UNIGE creates LINEAR, an Integrated Laboratory for Robotics-Applied Electronics
 - People:
 - 2 working partners
 - 2 employees
 - + 1-2 employees foreseen in 2016
 - consultants
 - **Self-financed**

Tech Areas / services

SWHARD can provide the customer with
services

- ▶ System design
- ▶ HW design
- ▶ SW/FW development
- ▶ FPGA programming
- ▶ Engineering

Tech Areas / services

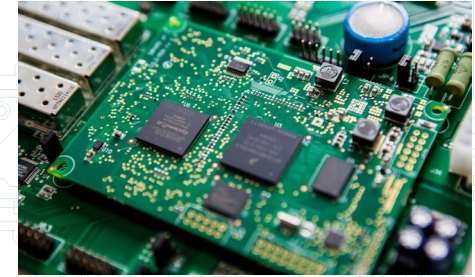
SWHARD can provide the customer with **services** in different **areas**

- ▶ System design
- ▶ HW design
- ▶ SW/FW development
- ▶ FPGA programming
- ▶ Engineering

- ▶ Industrial
- ▶ Automotive
- ▶ TLC
- ▶ Biomedical
- ▶ Power Management

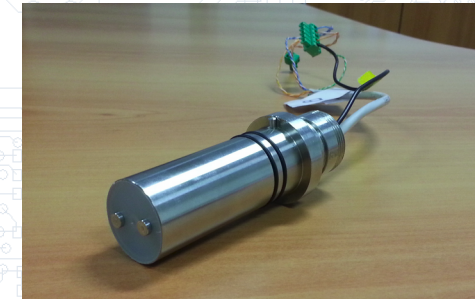
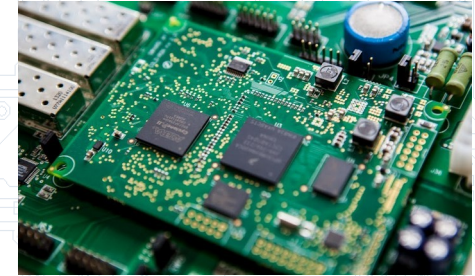
Examples

- ColdIron
a multi purpose, low cost, low power
industrial grade embedded SOM for use in
control system applications connectivity
and reliability centered



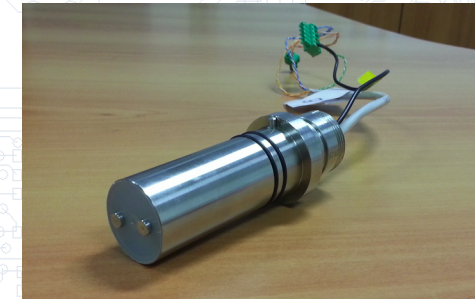
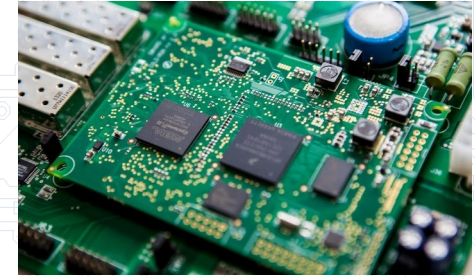
Examples

- ColdIron
a multi purpose, low cost, low power industrial grade embedded SOM for use in control system applications connectivity and reliability centered
- Sensor development
Study and development of HW, FW, SW (incl. GUI), testing, commissioning and remote management of motion and flux sensors



Examples

- ColdIron
a multi purpose, low cost, low power industrial grade embedded SOM for use in control system applications connectivity and reliability centered
- Sensor development
Study and development of HW, FW, SW (incl. GUI), testing, commissioning and remote management of motion and flux sensors
- OpenMCP
Study, design, development and realization of a general purpose motion controller platform, mainly aimed to prototyping, research and small productions (with UNIGE in LINEAR)



ATHENA - AREMBES

AREMBES consortium for ESA ITT A0/1-8243

Activities:

- Comprehensive review of existing literature about the validation of interest processes in G4
- New models for grazing incidence angle protons: Firsov and Remizovich
- Proton energy deposition tests
- Integration in Geant4

Company Competences

- **System Design**

- Embedded
- Realtime
- High Availability
- Distributed
- Low power

- **Hardware**

- Analog, Digital e Mixed-Signal
- MicroControllers
- MicroProcessors
- DSP
- FPGA

- **Interfaces**

- USB, Ethernet, WiFi, Bluetooth, CAN, I2C, SPI, PCIe

- **Protocols**

- TCP/IP, TIPC, IGMP, MPLS, STP etc

- **Firmware and Software**

- Windows

- Device Drivers
- Applications

- Linux

- Kernel Adaptation
- Device Drivers
- GCC cross-toolchains
- Applications

- VxWorks

- Applications

- Languages

- C/C++/C++11/C#
- Java
- Assembly
 - x86, PowerPC, TI DSP, ARM, Microchip etc
- Verilog/VHDL
- Python

- WEB

- ASP.NET Framework
- HTML
- SQL

- Databases

- SQL Server
- MySQL
- Oracle



Thank you