

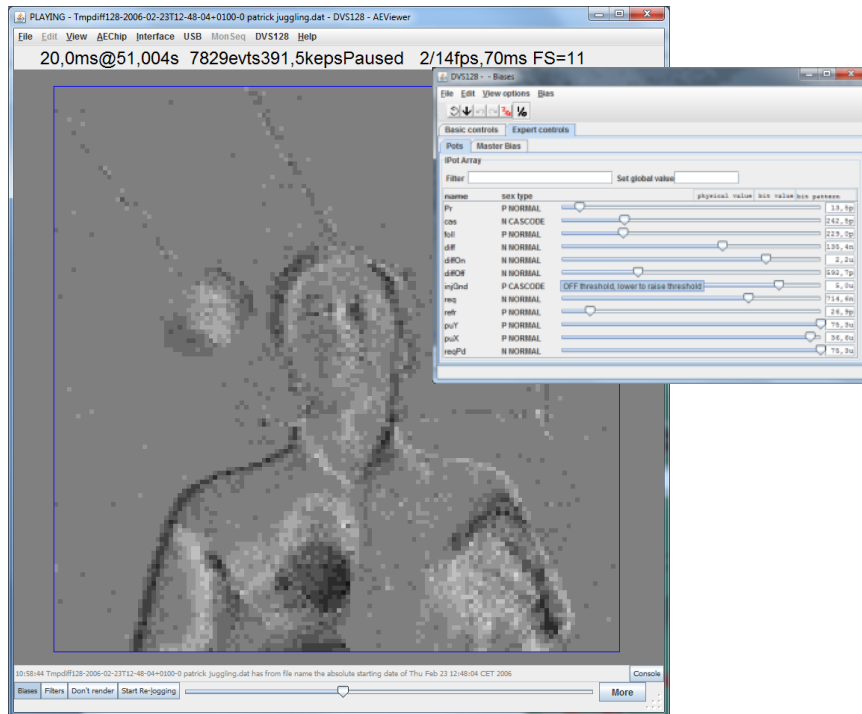
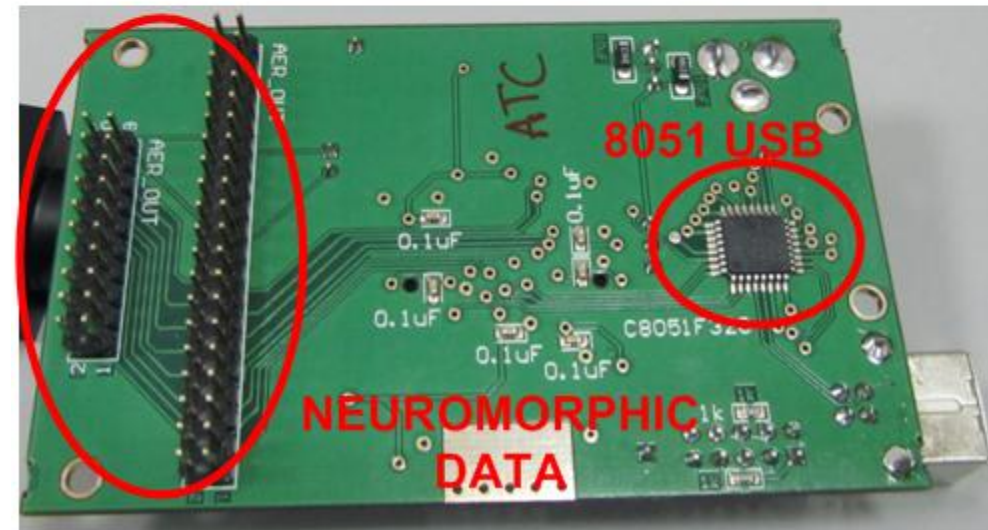
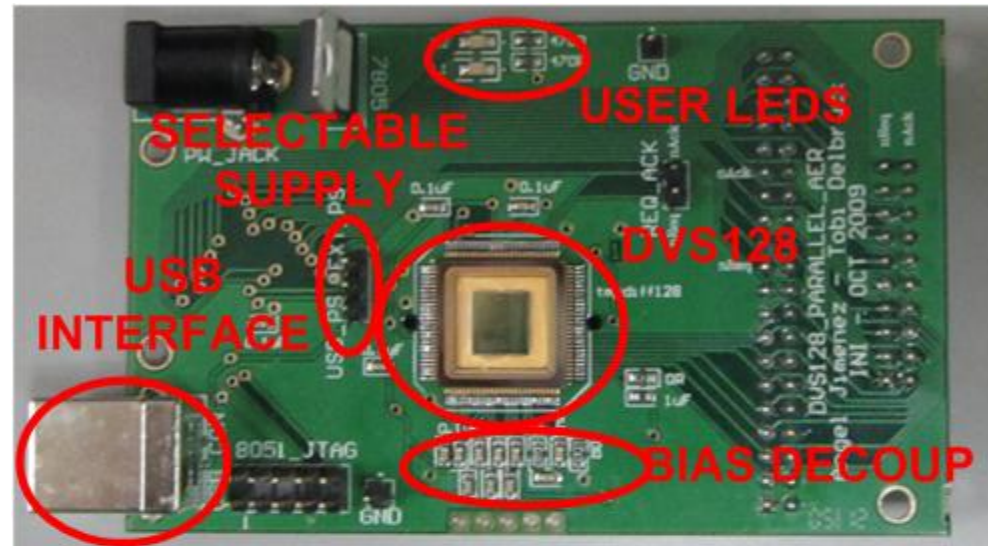


Robotic and Computer Technology Group (RTC): USB Embedded Systems

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Neuromorphic vision sensor USB interface

- Silicon retina (DVS128):
Institute of Neuroinformatics –
ETH Zurich.
- USB Interface:
 - Analog Bias Settings.
 - Information Monitoring.
- Host Interface: jAER

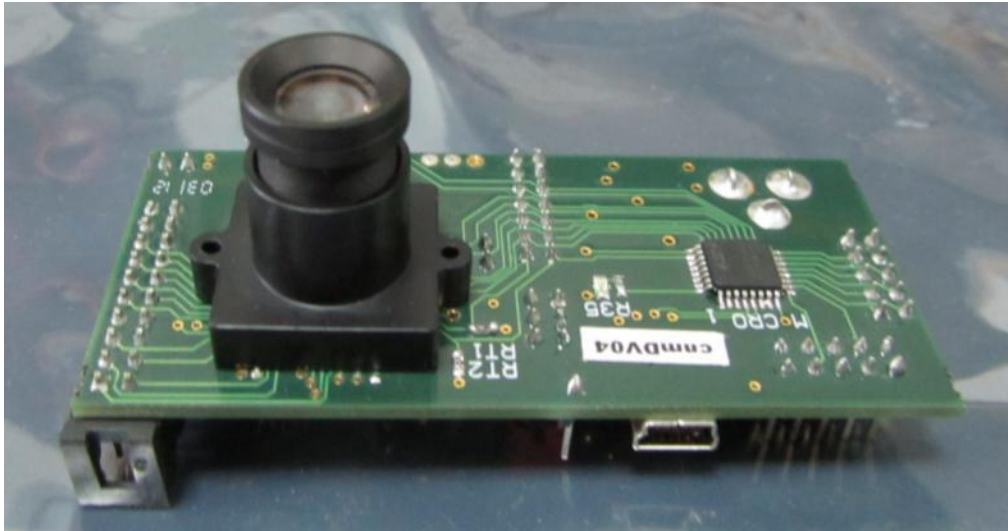


Neuromorphic vision sensor USB interface

- Silicon retina (cnmDV): Institute of Microelectronics – CNM Sevilla.
- USB Interface:
 - USB High-Speed interface (480Mbps).
 - Analog/Digital Bias Settings.
 - Information Monitoring.
- Host Interface: jAER



Retinas with lenses



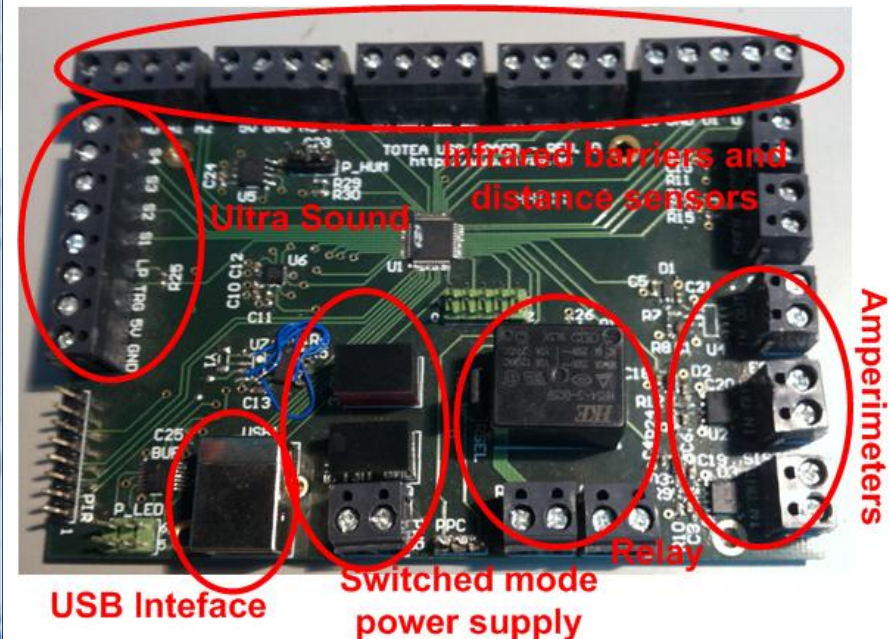
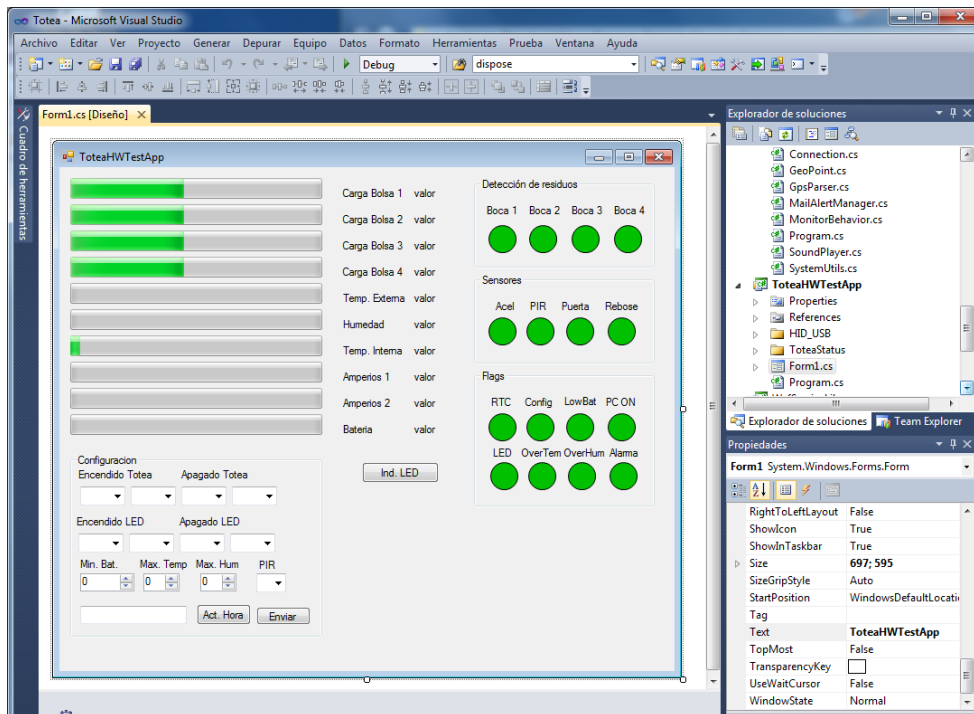
Wireless sensor networks for logistics management

- Embedded systems for workers guiding through a warehouse.
- Wireless xbee 2.4GHz distributed network.
- Milled enclosure for Display, leds and user buttons mounting.



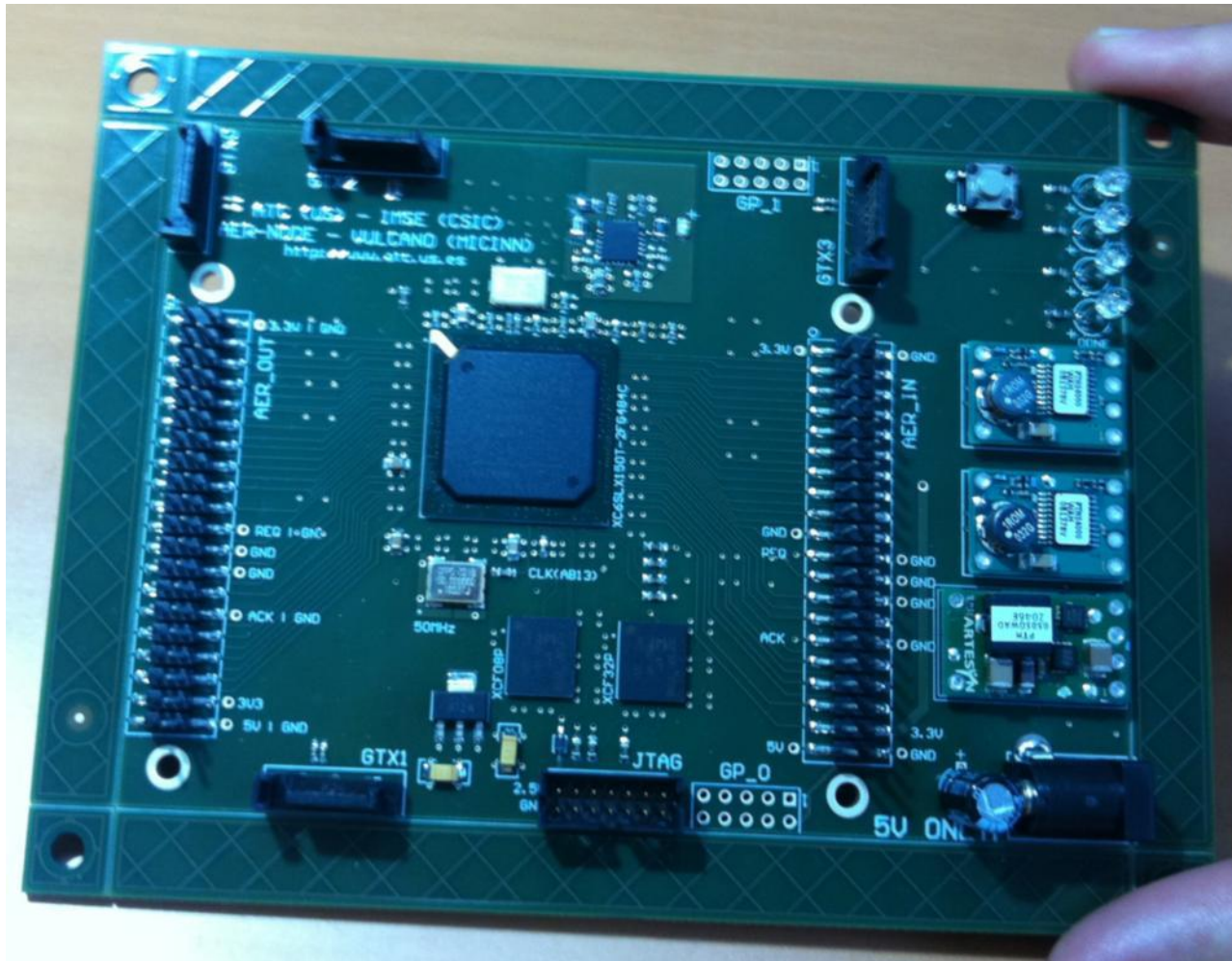
USB interface for smart recycler beans

- Interfaces a heterogeneous set of sensors with an embedded computer using the USB port.
- Senses the compartments load, detect residues input, analyze its power consumption...
- Custom user software application.



FPGA desing for neuromorphic systems

- AER Node board: Includes a Spartan 6 family FPGA.
- Provides 4 high-speed serial links (3Gbps).



FPGA desing for neuromorphic systems

- AER Robot board: Includes a Spartan 3 family FPGA.
- Able for driving and sense 4 DC motors using neuromorphic AER events. Provides an USB interface for user settings and board control.

