Can small companies upstream?
The story of an Industrial Camera manufacturer.

Ricardo Ribalda, PhD
Small vs BIG
Employees
Scope

Industrial Grade

Commercial Grade
Starts easy
Complicates...
Complicates...
Complicates...
Light at the end of the tunnel....
It works!
Benefits
Access to Developers

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Reduce Maintership cost

First, rewinding head to replay your work on top of it...
Applying: media: video_function_calls.rst: drop obsolete video-set-attributes reference
Applying: media: af9035: prevent buffer overflow on write
Applying: media: camss: mark PM functions as __maybe_unused
Applying: media: camss: Use managed memory allocations
Applying: media: camss: add missing includes
Applying: media: vicodec: add QP controls
Applying: media: vicodec: add support for more pixel formats
Applying: media: vicodec: simplify flags handling
Applying: media: vicodec: simplify blocktype checking
Applying: media: vicodec: improve handling of uncompressable planes
Applying: media: vicodec: rename and use proper fwhit prefix for codec
Applying: media: vicodec: split off v4l2 specific parts for the codec
Applying: media: vicodec: fix out-of-range values when decoding
Applying: media: ov772x: use SCCB regmap
Applying: media: ov9650: use SCCB regmap
Applying: media: ov5670, ov13858: Use pm_runtime_idle
Applying: media: i2c: Fix pm runtime get if in use() usage in sensor drivers
Applying: media: ipu3-cio2: Use dma_zalloc_coherent to replace dma_alloc_coherent + memset
Applying: media: ov772x: Disable clk on error path
Applying: media: ov5640: fix mode change regression
Reduce Maintenance cost

ricardo@piling:~/hacking/linux$ git rebase linus/master
First, rewinding head to replay your work on top of it...
Applying: media: video_function_calls.rst: drop obsolete video-set-attributes reference
Applying: media: af9035: prevent buffer overflow on write
Applying: media: camss: mark PM functions as __maybe_unused
Applying: media: camss: Use managed memory allocations
Applying: media: camss: add missing includes
Applying: media: vicodec: add QP controls
Applying: media: vicodec: add support for more pixel formats
Applying: media: vicodec: simplify flags handling
Applying: media: vicodec: simplify blocktype checking
Applying: media: vicodec: improve handling of uncompressible planes
Applying: media: vicodec: rename and use proper fwhl prefix for codec
Applying: media: vicodec: split off v4l2 specific parts for the codec
Applying: media: [media] ad5820: Define entity function
Applying: media: [media] ad5820: Add support for enable pin
Applying: media: [media] ad5820: DT new optional field enable-gpios
Applying: media: [media] ad5820: Add support of of-autoload
Applying: media: [media] ad5820: Add support for acpi autoload
Applying: media: [media] ad5820: Add support for ad5821 and ad5823
Applying: media: [media] ad5820: DT new compatible devices

ricardo@piling:~/hacking/linux$ ^C
Training
# Recruiting

![LinkedIn Job Search](image)

**All jobs filters**

**Date Posted**
- Past 24 hours (1317)
- Past Week (9241)
- Past Month (27492)
- Any Time (31282)

**Linkedin Features**
- Under 10 Applicants (29370)
- Easy Apply (331)
- In Your Network (1389)

**Job Type**
- Full-time (29874)
- Internship (707)
- Part-time (554)
- Contract (255)
- Temporary (74)
- Volunteer (42)
- Other (11)

**Location**
- Add a filter
- Copenhagen (8793)
- Aalborg (857)
- Aarhus N (244)
- Melby (142)
- Hedehusene (37)

**Company**
- Add a filter
- Danske Bank (112)
- IT-Universitetet i København (34)
- DFDS (35)
- Mercedes-Benz Sverige (4)
- Sygehus Lillebaelt (32)

**Industry**
- Add a filter
- Computer Software (4662)
- Financial Services (1983)
- Higher Education (2384)
- Information Technology and Services (5648)
- Staffing and Recruiting (3916)

**Job Function**
- Add a filter
- Information Technology (8233)
- Sales (4183)
- Business Development (2641)
- Engineering (2607)
- Customer Service (1726)

**Experience Level**
- Add a filter
- Internship (1106)
- Entry level (13060)
- Associate (7569)
- Mid-Senior level (2022)
- Director (849)
- Executive (243)

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**WE ARE HIRING**
Visibility
FREE HUGS Features!

- I/O Controller and IF Management
  - eSPI/PoGo/PCIe IF Controller
  - Super Hardware Monitor + ISO
  - Hardware Keyboard Controller
  - USB Consumer IR (CIR) receiver IC for Windows Vista/Windows 7
  - Power Saving (EU APIs) ISO & Controller
  - Transceiver and Buffer
  - ISO with Microcontroller (uISO)
  - CAN Bus Controller
- Environment Sensor and Glue Logic IC
  - Environment Sensor and Fan Controller
  - Pure Logic IC
  - Performance Controller
  - Real Time Clock
  - Power Management and ACPI

**F81216A**

### General Description

The F81216AD mainly provides 3 pure UARTs and one UART+ IR port through LPC.

Each UART includes 16-byte send/receive FIFO, a programmable baud rate generator, or interrupt system.

One watch dog timer is provided for system controlling and the time interval can be programmed. One clock 24/48MHz input is necessary, and default is 24MHz. Powered by 3.48p LQFP package (7mm x 7mm).

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**USB 3380**

USB Controllers USB 3380

**OVERVIEW**

The USB 3380 is a PCI Express Gen 2 to USB 3.0 SuperSpeed Peripheral Express Gen 2 x1 port and one USB 3.0 SuperSpeed client port. The bandwidth at 5 Gbps between the PCI Express Gen 2 bus and USB controller can easily add a USB 3.0 client port to an existing PCI Express function (endpoint) to a USB 3.0 product. The USB Express port as one x1 upstream port or one x1 downstream port. The configurations to achieve the maximum performance of the product. The buffer, 100 MHz HCSL output clocks, for the downstream port when saving BOM cost by eliminating the need for extra clock buffer(s).

**Lifecycle Status**

Not Recommended for New Design

**Replacement Part**

Contact Sales
Access to documentation
Influence in APIs
Drawbacks
CONTRIBUTE!
Our experience

- **Linux Kernel**: 200+ patches. Including a 9+ year old bugfix.
- **U-boot**: 48 patches. Maintainers of Virtex PowerPC boards.
- **Yocto project**: 60+patches. Supporting organization of the project.
- **v4l-utils/libv4l2**: 10 patches.
- **Gstreamer**: 5 patches accepted.
- **Coreboot**: 6 patches accepted.
- **Flashrom**: Support for the first board with EEprom memory.
- **Gerbil, Clpeak, Video Lan Client, neard...**
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