OpenAMP 2016.10 Kickoff

Agenda

XILINX ➤ ALL PROGRAMMABLE.

Agenda

> OpenAMP 2016.04 Release Announcement: 10mins

> OpenAMP MCA Working Group: 5 mins

> OpenAMP 2016.10 features discussion: 105 mins

XILINX INTERNAL

ΣXILINX ➤ ALL PROGRAMMABLE.

OpenAMP 2016.04

≨ XILINX ➤ ALL PROGRAMMABLE.

OpenAMP 2016.04 Release

❯ OpenAMP tag 2016.04

– OpenAMP source code restructure

– Bug fixes

❯ Libmetal tag 2016.04

– It provides the following APIs crossing OS/platforms:

- atomic operations

- mutex

- shmem

- io

- list

- simple utilities such as:

– Structure container

– Bitmap

– align up/down

OpenAMP MCA Working Group

OpenAMP MCA Working Group

> **Weekly meeting**

> **Standardize OpenAMP specification**

- Rpmsg (exists)

- Virtio (exists)

- Libmetal (required)

  - start review next week

> **OpenAMP orchestration problem**

- AMP system life cycle management

XILINX > ALL PROGRAMMABLE™

OpenAMP 2016.10

XILINX ➤ ALL PROGRAMMABLE.

OpenAMP 2016.10

- Zero copy implementation(from NXP)

- Extend libmetal APIs (NXP)

- Enable libmetal on more systems rather than Linux

- Port OpenAMP on top of libmetal

- Linux userspace rpmsg, virtio and remoteproc

- Add Linux userspace inter processes rpmsg support

- Rpmsg RTOS layer (NXP)

- Decouple remoteproc and rpmsg such that they are usable in a standalone fashion.

- sysfs rpmsg kernel module (NXP)

- Enable Linux to operate as a remote OS cleanly, a custom rpmsg driver is used for this purpose.

- Enable OpenAMP on 64bit processor

- large rpmsg buffers
  – Using the descriptors chaining and large buffer size

- Dynamic negotiation of rpmsg size

- Tests extension

XILINX INTERNAL

XILINX ➤ ALL PROGRAMMABLE.