



Green Flash

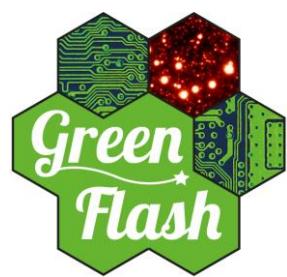
High performance computing for real-time science

WP 7.1 & 7.2 Status

Mid-Term Review – Meudon Feb. 2017



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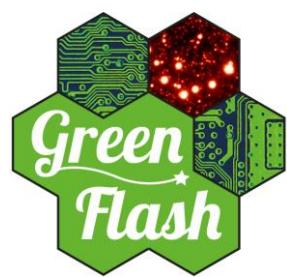
Agenda

- Work Package WP7 Highlights
- State of the art
 - Status
 - Findings
 - Issues & Concerns
- Overall planning for the remaining activities
- Discussion



Work Package Highlights

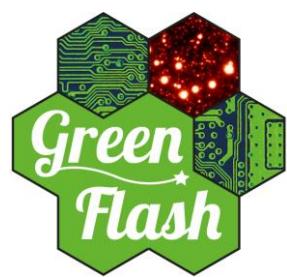
- Object: FPGA Development Environment
- Objective: Develop, expand and maintain the development environment for FPGA – QuickPlay - to meet project needs (in a generic wide application range approach)
- Connection to other WPs :
 - Supports of boards defined in WP 3 (Microgate μ XComp and μ XLink boards)
 - Most of features identified in tasks 7.1 & 7.2 participate in WP 5 (mainly task 6.3)



WP7.2 – Plans achievement

Feature	Status	Delivery / Notes
Arria 10 support	Done	QP dev version / XpressGXA10
DDR4 support	Done	QP dev version / XpressGXA10
[Peer to Peer] - FPGA to GPU Proof Of Concept	Done	Delivered in D5.1 (Proto 1)
[Ethernet sub-system] - UDP Multicast	Done	QP 2.1 / June 2016
[Ethernet sub-system] - Raw mode interface	Done	QP 2.2 / October 2016
GigE Vision preliminary support	Done	Delivered in D5.1 (Proto 1)

Feature	Status	Delivery / Notes
Aurora	Descoped	No need for OBSPM / MIC
NIC compliance - Preliminary support	Descoped	See WP5
Open MPI compliance - Preliminary support	Descoped	See WP5



WP7.2 – Plans update

Feature	ETA	Delivery / Notes
HMC support	31/03/2017	Smart Interconnect Proto #3
[Peer to Peer] - Generic support	30/04/2017	Smart Interconnect Proto #3
Arria 10 SOC support	15/09/2017	Smart Interconnect Proto #4
Support a RootPort implementation of the PCIe	30/09/2017	Smart Interconnect Proto #4
[Ethernet sub-system] - PTP 1588 support	TBD	Candidate for Proto #5
[Ethernet sub-system] - down-scaling to 1G	TBD	Candidate for Proto #5
[Ethernet sub-system] - up-scaling to 40G	NA ?	No real need identified up to now
CameraLink	TBD	Not planned. Need to be confirmed
Open DDS compliance - Preliminary support	Q2 2017	