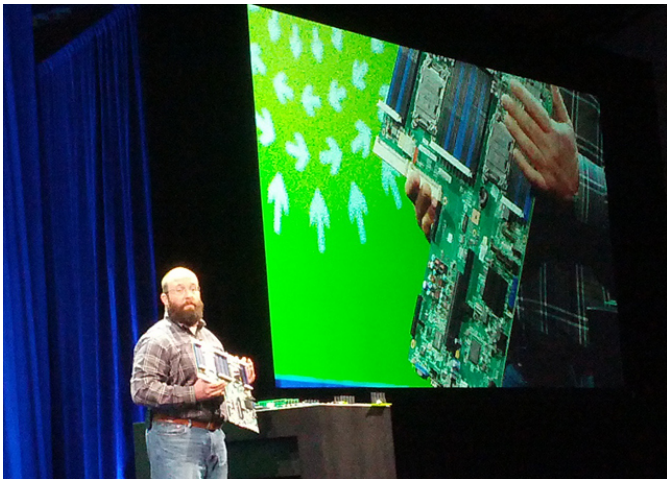# Intel, Facebook Team Up Data Centres

Written by Marco Attard
17 January 2013

Open source is the way to go, at least for Facebook-- the social network open-sources more data centre designs at the Open Compute Project (OCP) Summit IV and announces a rack technology collaboration with Intel.

The 2 companies are working on "a new disaggregated, rack-scale server architecture that enables independent upgrading of compute, network and storage subsystems that will define the future of mega-data centre designs for the next decade," Intel CTO Justin Rattner says.

The future rack architecture is based Intel's silicon photonics technology, seen at the summit in Quanta-built mechanical prototype form. The photonics technology replaces copper interconnects with optical fibre, allowing for fewer cables, increased bandwidth (up to 100Gbps) and "extreme" power efficiency.

The Quanta prototype includes distributed I/O via Intel ethernet switch silicon and supports current generation Xeon processor and next-gen 22nm Atom SoC processors. In the future the design will be standardised, following more work with Facebook and corning.

Facebook also shows off a common slot architecture at the OCP Summit-- the adorably named "Group Hug" specification for the production of vendor-neutral motherboards able to accommodate   up to

Intel, Facebook Team Up Data Centres

Written by Marco Attard
17 January 2013

x10 SoCs.

Further open compute contributions from the social network include Dragon Stone (a design spec for a low-power "cold data" storage server) and Winterfell (a web server design fitting more servers per rack).

Go [Intel, Facebook Collaborate on Future Data Centre Rack Technologies](#)

Go [OCP Summit IV: Breaking Up the Monolity](#)