HSA Specification Reaches 1.0

Written by Marco Attard

18 March 2015

The Heterogeneous System Architecture (HSA) Foundation releases the 1.0 HSA specification-- a "major milestone" in the bringing about "true heterogeneous computing" across mobile devices, PCs and servers.

What is HSA? It is a standardised platform design claiming to unlock the performance and power efficiency of the parallel computing engines found in modern devices. It is supported by over 40 vendors (including AMD, ARM, Imagination Technologies, LG, MediaTek, Qualcomm and Samsung) and 17 universities, and provides developers with means to easily exploit the hardware resources found in complex systems-on-chips (SOCs).

"Through HSA, we are working to ensure that end users of technology live in a world of new, incredible applications that run fast at low power," the HSA Foundation says. "The Foundation members have been collaborating on this project since we joined together in June 2012, and we are thrilled to be delivering the fruit of that labour today."

The HSA specification comes in 3 parts-- the HSA System Architecture Specification (defines how hardware operates), HSA Programmers Manual (provides software tools) and the HSA Runtime Specification (defines how applications interact with HSA platforms).

"Release of the new specification should help improve more power efficient computing performance across a wide array of computing platforms," research firm Moor Insights & Strategy says. "I anticipate a lot of interesting use cases, from video chat apps and search to TV shows and movies. App developers should also find it easier to harness all of the processors together."

So far the industry offers one piece of hardware with HSA support, the AMD "Carrizo" A-series

HSA Specification Reaches 1.0

Written by Marco Attard

18 March 2015

[APU](#)   . However,
according to EE Times, other leading vendors, namely Intel and Nvidia, fail to show interest in
the standard, replying to HSA Foundation queries with a curt "no thank you."

Go [HSA Foundation Launches New Era of Pervasive, Energy-Efficient Computing with HSA
1.0 Specification Release](#)

Go [SoC Spec Hits Version 1.0 (EE Times)](#)