

AptCore Release Higher Performance Optical Pixel Processor

Bristol, UK, April 8 2015 - AptCore (www.aptc core.com) have released a new processor core optimised for pixel based operations. The core targets image processing and machine vision, and possesses design features that will particularly suit automotive usage. Utilising AptCore's unique processor architecture and data access structure, the core can achieve close to 100% efficiency for its target applications, including Harris Corner Detect, Histogram of Oriented Gradients (HOG) and Canny Edge Detect.

The ACP processor is software programmable and can be controlled by a standard RISC processor. AptCore provide a library of functions that can be called from a host processor ensuring that the core is straightforward to use.

AptCore Director of Silicon, Leon Wildman, said 'We have achieved a lot in a very short space of time. The novel architecture means that silicon area can be minimised, and by also minimising data movement the core has the potential to achieve exceptional levels of power efficiency. '

Tim Styles, Technical Director said 'This new core is fully programmable and will provide a very flexible option for those requiring a high level of performance for pixel based image processing. The ability to scale the number of cores means that any level of performance can be catered for. This means engineers using this core will not have to change their code as their designs evolve and increased performance is required.'

The ACP core complements AptCore's highly successful ACR radar processor core, currently in use in several automotive radar and security systems.

A derivative of the ACP is already being used in FPGA form within an automotive collision avoidance system, and it is also likely that it will be used for the image processing within the Venturer driverless car project based in Bristol. Further testing is planned ahead of the official launch scheduled for June.

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