Fully Configurable Video Coding Beyond Compression Standards

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Setting the scene



High quality High compression Low computation



Low quality Low compression High computation

The problem with the status quo





CHEAP AS CHIPSETS

Why buy ONE chip when you can buy THREE?



New Product Announcement 15th April 2009

Look out for our brand-new video compression technology. It's miles better than H.264 and it will be featured in YOUR products by 2015.

Can't wait that long ? TOUGH.



ONE SIZE FITS ALL

Standard X : Guaranteed to be optimal for every video clip?





A new approach

Fully Configurable Video Coding















How it works

Video decoding process

Bitstream decoding Data manipulation Arithmetic + logic Video signal processing Control flow Video output



Decoder Description Syntax

DDS

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Demonstration





	Standards based	MPEG Reconfigurable Video Coding	Java Virtual Machine	Fully Configurable Video Coding
Syntax + decoder design	Fixed	Modular (fixed library)	Fully flexible	Fully flexible
Time to market for new ideas	Slow	Medium	Fast	Fast
Support for multiple formats	One decoder per format	One decoder + tool library	One decoder	One decoder
Computational performance	Fast	Medium/Fast?	Slow	Medium/Fast?
Support for adaptive coding	No	No (fixed at run- time)	Maybe	Yes

FLEXIBILITY

- Multi-format
- Time to market
- Adaptive



Outlook

Status Quo:

Fully Configurable:







www.openvideocoding.org

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