DeepView 2.3.x Inference Time

Increasing Computational Load

Standard / Public Models

SoC	ST H7	RT 1060	Arc HS38	STM32 MP15X	I MX.7 D CPU	I MX.6 QP CPU	I MX.8X CPU	I MX.8 QM CPU	HiKey 960	I MX.8M CPU	I MX.8M Mini CPU	RPi 3B+	Renasas CPU	RPi 4B	LS 1046A CPU	I MX.8M GPU	I MX.8X GPU	I MX.8 QM	HiKey 960	Coral	RK1808	i.MX8M Plus
Category	MCU			CPU (all available cores)												GPU (single core, all shaders)				NPU		
Core	M7	M7	HS38	A7	A7	A9	A35	A53	A53	A53	A53	A53	A15	A72	A72	GC 7000	GC7000Lite	GC7000	Mali G71	edge TPU	VIP8000	VIP8000
Model Profiled/MHz	400	600	1000	650	996	996	1200	1200	1800	1500	1800	1400	1400	1500	1800	800	700	798	900			
DNN_S																						
DNN_M																						
DS_CNN_S																						
DNN_L																						
CNN_S																						
DS_CNN_M																						
CNN_M																						
MobileNet V1 0.25 128																						
MobileNet V1 0.25 160																						
CNN_L																						
DS_CNN_L																						
MobileNet V1 0.5 128																						
MobileNet V1 0.25 224																						
MobileNet V2 0.35 160																						
MobileNet V1 0.5 160																						
MobileNet V2 0.5 160																						
MobileNet V3 SmallMin 1.0 224																						
MNasNet 1.0 96																						
MobileNet V1 0.75 128																						
MobileNet V2 0.35 224																						
MNasNet 1.0 128																						
MobileNet V3 Small 0.75 224																						
MobileNet V1 0.5 224																						
MobileNet V2 0.5 224																						
MobileNet V2 0.75 160																						
MobileNet V3 Small 1.0 224																						
MobileNet V1 0.75 160																						
MobileNet V1 1.0 128																						
MNasNet 0.5 224																						
PoseNet																						
MobileNet V2 1.0 160																						
MNasNet 1.0 160																						
MNasNet 0.75 224																						
MobileNet V3 LargeMin 1.0 224																						
MobileNet V1 1.0 160																						
MobileNet V2 0.75 224																						
MNasNet 1.0 192																						
MobileNet V1 0.75 224																						
MobileNet V3 Large 0.75 224																						
MobileNet V2 1.0 224																						
MNasNet 1.0 224																						
MobileNet V3 Large 1.0 224																						
MobileNet V1 1.0 224																						
MNasNet 1.3 224																						
MobileNet V2 1.4 224																						
SSD V1 0.75 300																						
SqueezeNet (1.1*)																						
SSD Lite V2 300																						
Inception V1																						
SSD V1 300																						
NasNet Mobile																						
ResNet V1 50																						
ResNet V2 50																						
SSD V2 300																						
Inception V3																						
ResNet V1 101																						
ResNet V2 101																						
ResNet V1 152																						
ResNet V2 152																						
Inception V4																						

Faster

Inference Time

Slower

Au-Zone Technologies Inc.

Increasing Compute

www.embeddedml.com

20-01-31 10:52 AM