TVM on Hexagon™ DSP

• Background, goals, and motivations:
  ◦ Qualcomm® Hexagon DSP with Hexagon Vector eXtensions (HVX).
  ◦ Compiler development: LLVM + Hexagon.
  ◦ Ease of use and accessibility of Hexagon hardware features.
  ◦ Reuse of technology: TVM = ML + LLVM.

• TVM on Hexagon now:
  ◦ Hexagon as device and compilation target.
  ◦ Execute computational kernels on simulator.

• TVM on Hexagon future:
  ◦ Quantized data.
  ◦ Offload subgraphs.
  ◦ Hexagon support upstream.
  ◦ Everything runs flawlessly using minimum resources.
Thank you!

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