

# Chapter 7 Conclusion

In this thesis, we implement an H.264/AVC decoder on VP<sup>3</sup> and propose an Quadro-Field based error resilience and error concealment technique. We conclude our accomplishments as below.

1. We profile the H.264/AVC decoder complexity by using C.C.S and implement an H.264/AVC decoder on VP<sup>3</sup>.
2. The H.264/AVC decoder implement on VP<sup>3</sup> may achieve the frame rate of 15 fps.
3. We propose three types of Quadro-Field coding structure: Parallel Prediction Quadro-Field Coding (PPQFC), Full Search Prediction Quadro-Field Coding (FSQFC), and Separate Prediction Quadro-Field Coding (SPQFC). Considering the dependency and coding efficiency, we choose the Separate Prediction Quadro-Field Coding (SPQFC) as our coding structure.
4. For the Separate Prediction Quadro-Field Coding (SPQFC) scheme, we use content based spatial interpolation and temporal replacement to conceal lost macroblocks.

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