AMD **Accelerated** Parallel Processing TECHNOLOGY

SAMPLE

C++ AMP Parallel Reduction

1 Overview

1.1 Location

`$(AMDAPPSDKSAMPLESROOT)\samples\C++Amp\samples\ParReduction\`

1.2 How to Run

1. Before running this sample, install Microsoft® Visual Studio® 2012 or higher, as well as the latest AMD APP SDK.
2. Compile the sample. Use the command line to change to the directory where the executable is located.

2 Introduction

This C++ AMP sample executes a parallel reduction algorithm and introduces the concepts tiled_extend, tiled_index, tile_barrier, and tile_static storage.

3 Implementation Details

The input array is divided into multiple groups of 64 elements. Each group produces a partial sum result, which is computed by a tile of 64 threads in parallel. Then, the partial sums are added on the CPU

4 Reference

http://msdn.microsoft.com/en-us/library/hh873135

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