Gedae Portability: From Simulation to DSPs to the Cell Broadband Engine

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The Software Architecture Makes Hardware Refreshes Difficult

Old System

PE-0
Code 0

PE-1
Code 1

PE-2
Code 2

PE-3
Code 3

New System

PE-A
Code A

PE-B
Code B

PE-C
Code C

PE-D
Code D

PE-E
Code E

PE-F
Code F
Application Environment

- Search and track using four audio channels
- Display using camera directed by pan-tilt unit
Stages in Development

Developed as simulation with file input and rendered output

Deployed on quad PowerPC board, processing in real time at limited frame rate

Hardware refresh to Cell Broadband Engine processor, processing more frames per second