Motivation
- The warfighter requires visual identification to engage ground targets
- Optical systems have difficulty at long range and in inclement weather
- Radars are reliable long range systems
- SAR Backprojection produces the most accurate long range radar images compared to other image formation processes

Problem
- SAR Backprojection has the highest computational cost
- AFRL researchers developing Backprojection algorithms in MATLAB must wait hours to produce an image from gigabytes of Radar data

Solution
- Reduction of computational time, power and physical volume at the imaging source

Result
- Real-Time SAR Backprojection will enable higher quality sensors for time critical applications
Unified Applications Environment

Universe of all Software → C or Fortran Source → Code Written Specifically for MAP®

Carte™ Programming Environment

μP Compiler Tools → Unified Executable → MAP Compiler Tools

μP

Implicit DLD

Explicit DEL

Unified Program Execution

Standard Network

Linux Operating System

Standard Peripherals
SRC Embedded Solutions