

SecretBlaze Processor

Core

Instruction
Fetch

IM Bus
Interface

Instruction
Decode

Register
File

Execute

ALU

MSR

INT

Memory
Access

DM Bus
Interface

Write-Back

int_i
halt_sb_i
clk_i
rst_n_i

im_bus_i/o

dm_bus_i/o

Memory Unit

IM Decoder

DM Decoder

Instruction
Cache

Internal
RAM

Internal
RAM

Data
Cache

WB IM Bus
Master Interface

WB DM Bus
Master Interface

wb_im_bus_i/o

wb_dm_bus_i/o

