



Power Forward Proof Point Projects

September 28, 2006



Proof Point Project Objective

- To use the CPF proof point projects as a means to validate that the CPF meets the requirements of the user community
 - It is comprehensive in covering low-power techniques employed by the broad coalition of companies
 - It is comprehensive in addressing every step of the design process in a consistent way
 - It is easy to use and easy to integrate into existing design flows



Proof Point Project through PFI

- Each PFI Advisor will exercise a tool or set of tools to validate that the CPF works functionally through elements of the design flow
- Each PFI Advisor may provide feedback on the CPF based on their proof point projects to either the PFI and/or the IEEE WG (when formed)

Proof Point Projects

It is ...	It is NOT ...
The responsibility of the PFI member company for delivery.	a production project (usually)
A project that exercises elements of the design flow using the CPF	used to benchmark tools and flows
Opportunity to assess and feedback on the ability of CPF to support low-power methodology	used to assess the low-power savings provided by using CPF
Generally small-medium in scope (2-5 months with 2-5 resources)	required to have a design be implemented in silicon



Proof Point Project tentative checklist

Project validation objective	PFI-A 1	PFI-A 2	PFI-A 3	PFI-A 4	PFI-A 5	PFI-A 6	PFI-A 7	PFI-A 8	PFI-A 9
Architectural trade-offs				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		TBD	TBD
Functional Verification	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Synthesis and Optimization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Partitioning and Floorplanning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
CTS and Place & Route		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Formal Verification	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Physical Extraction and IR Drop Analysis		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Test Scan and ATPG	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				



Example Proof Point Project

