EDA Forecast Dinner

Chris Rowen

Tensilica

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EDA in the headlines:
Unexpected regional issues for EDA leaders

EDA in the headlines:
Opening up new customer categories


INTERNATIONAL
Herald Tribune
THE GLOBAL EDITION OF THE NEW YORK TIMES

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With rates falling, Fed seeks new tools to fight recession

EDA in the headlines:

Technical opportunities in new materials

The Climate

- Some Harsh Realities of the Recession
  - Semiconductor industry experienced a very weak Q4 and expects more of the same in 2009
  - Impact is global – no regions are immune (though timing will vary)
  - Near-term impact on
    - Purchasing process – buyers have become intensely cash conscious. Uncertainty creates ample reasons to delay, few reasons to accelerate deal sign-off
    - Program stretch-out and lay-offs exert pressure on prices, seats,
    - Particularly tough environment for start-ups – secular shift of VCs away from semiconductor-related investment
- But design continues
  - Recession is not about electronics, so expectations for long-term opportunities in consumer, communication and computing remain bright
  - Cheaper deep-sub-micron wafers accelerates transition to 65 and 45nm ➔ new tools and IP
  - Maximizing differentiation provides greatest defense against semiconductor price erosion

The IP Outlook

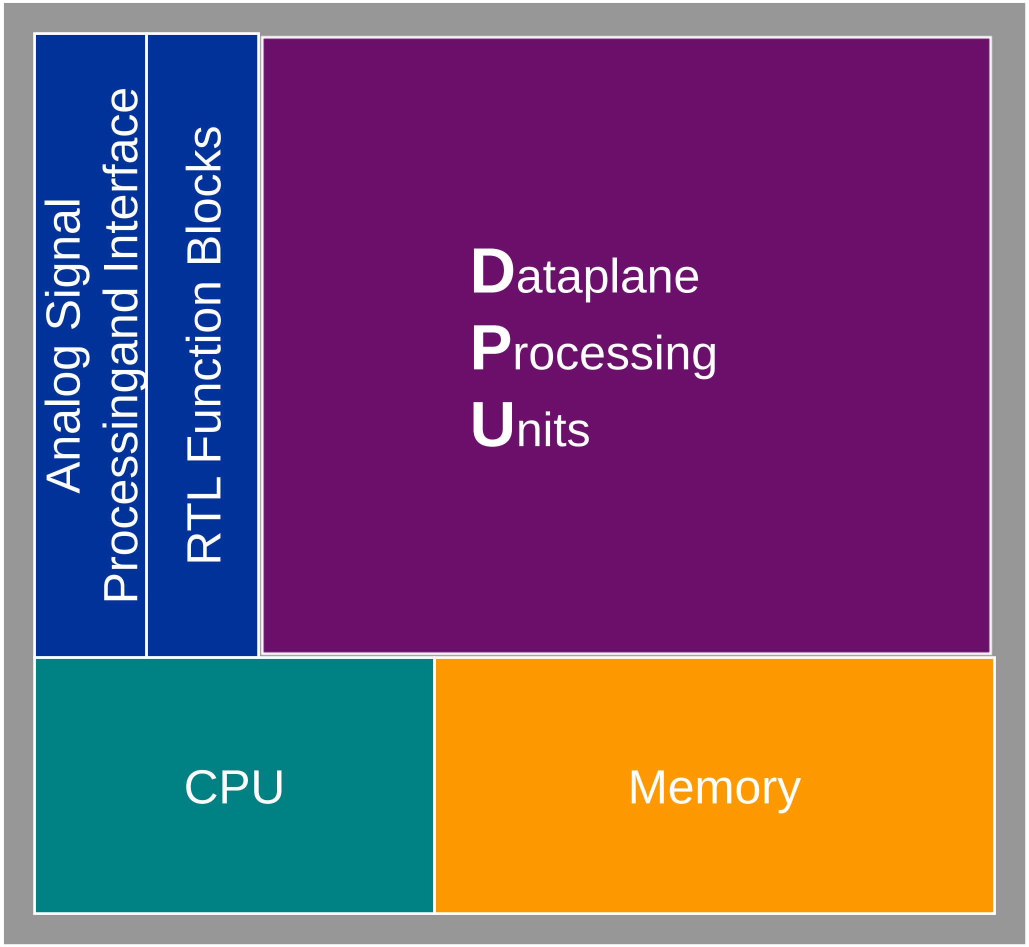
- IP is more than out-sourcing: cuts overall costs, reduces risk and enables more complete SOC integration
- Strongest segments: Digital and analog signal processing (aka “the dataplane”)
- Most challenging area: physical and block libraries (commoditized by foundries?)

Group	Category	2008 Market Size	Growth %
Processors	Microprocessors	582	6.2
	Digital Signal Processors	52	**21**
Physical IP	Analog and Mixed Signal	205	**22**
	PHY	149	8.4
	Memory cells/blocks	132	4
	Physical library	62	-6
Other IP	Fixed function signal processing	182	**16**
	Interface controllers	79	5.5
	Block libraries	29	-16.5
	Infrastructure IP	34	3.1
	Miscellaneous IP	28	-11.4
	Controllers and peripherals	6	-15.2
	Total design IP	**1486**	**8**
	Technology licensing	**587**	**6.8**
Total IP		**2073**	**7.7**

Source: Gartner Dataquest Inc preliminary market size based on Q1-Q3’08, actual likely to fall below 7%, 12/2008

Strong Growth in Dataplane processors

Configurability and programmability aid differentiation and time-to-money



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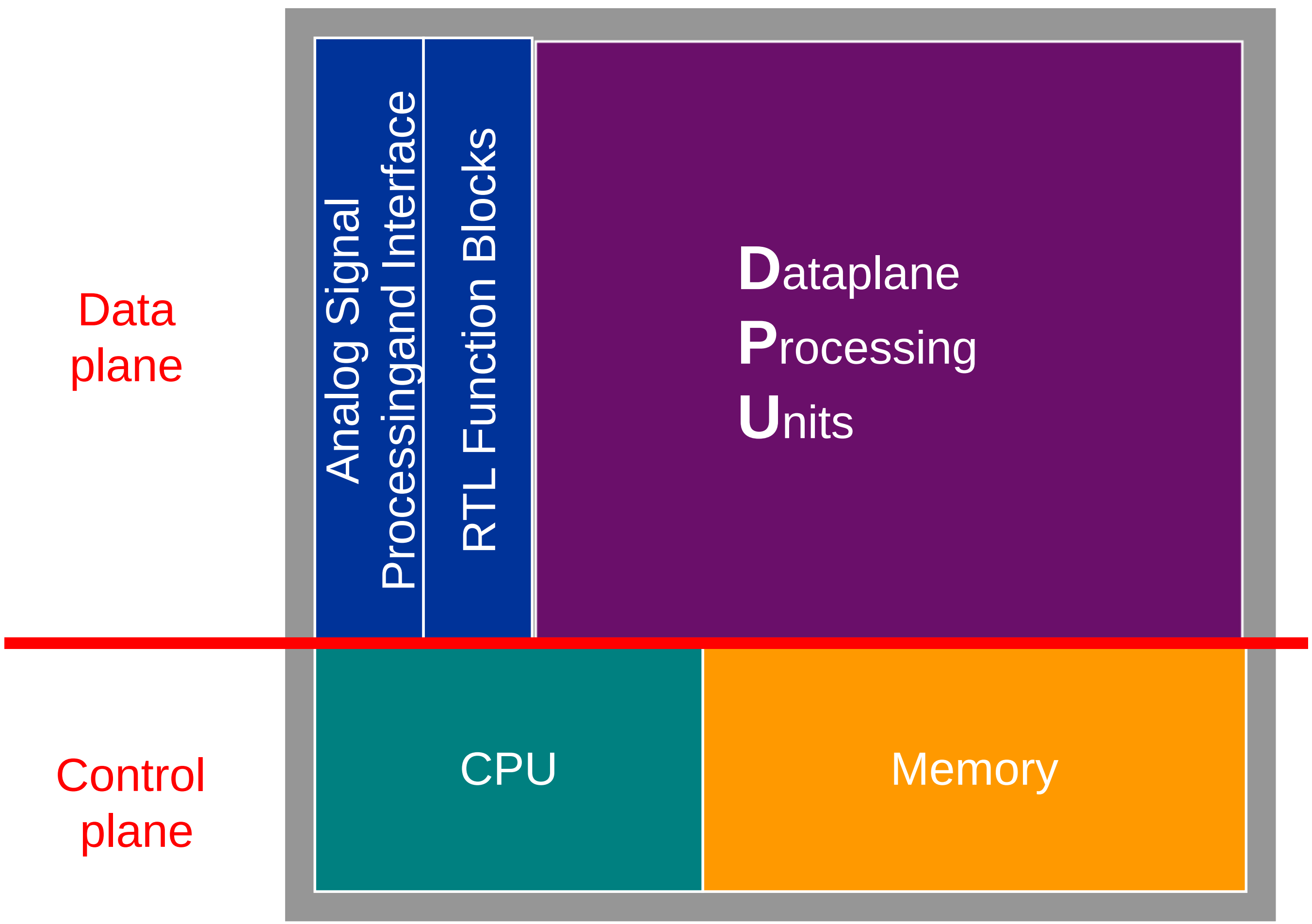

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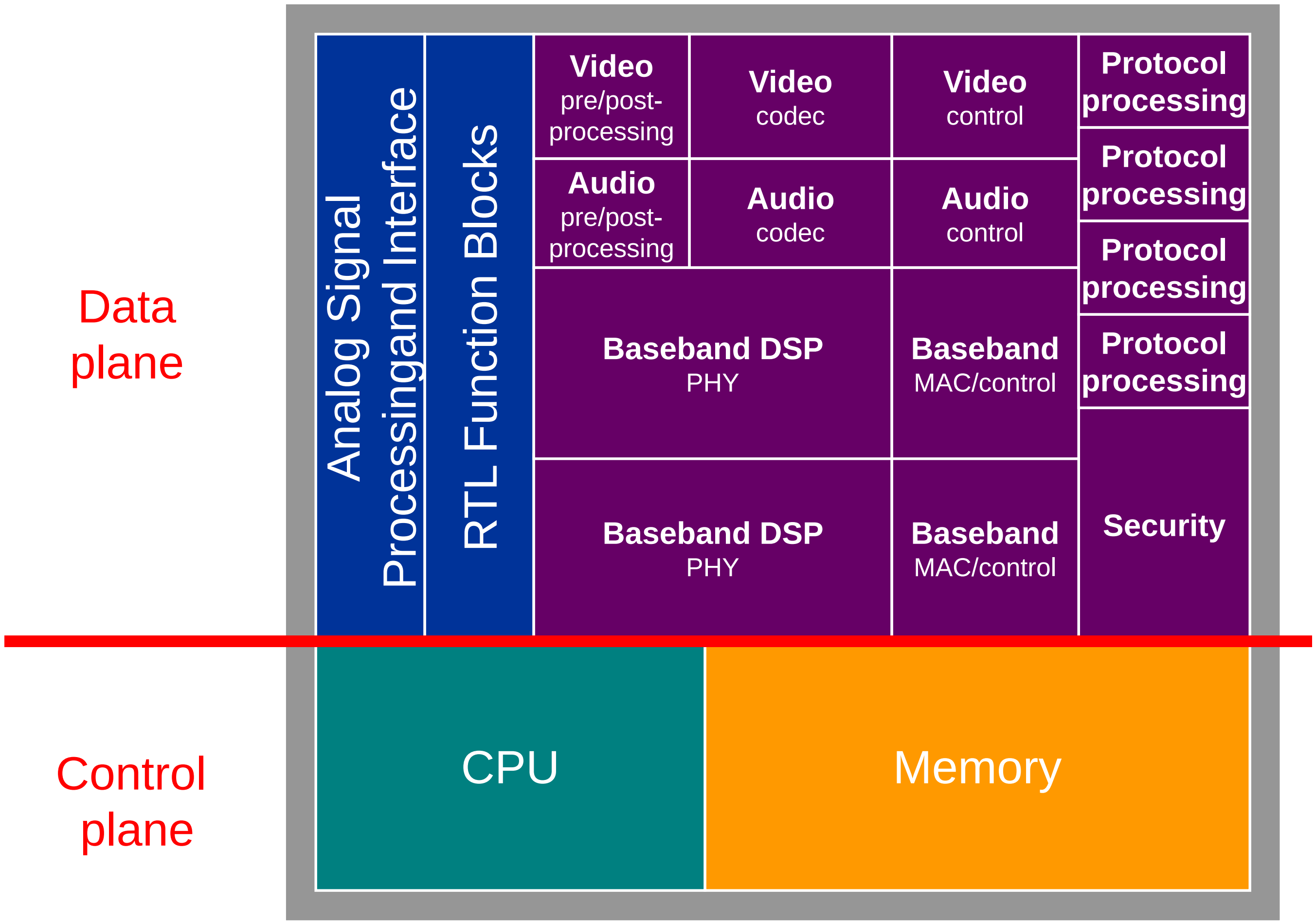
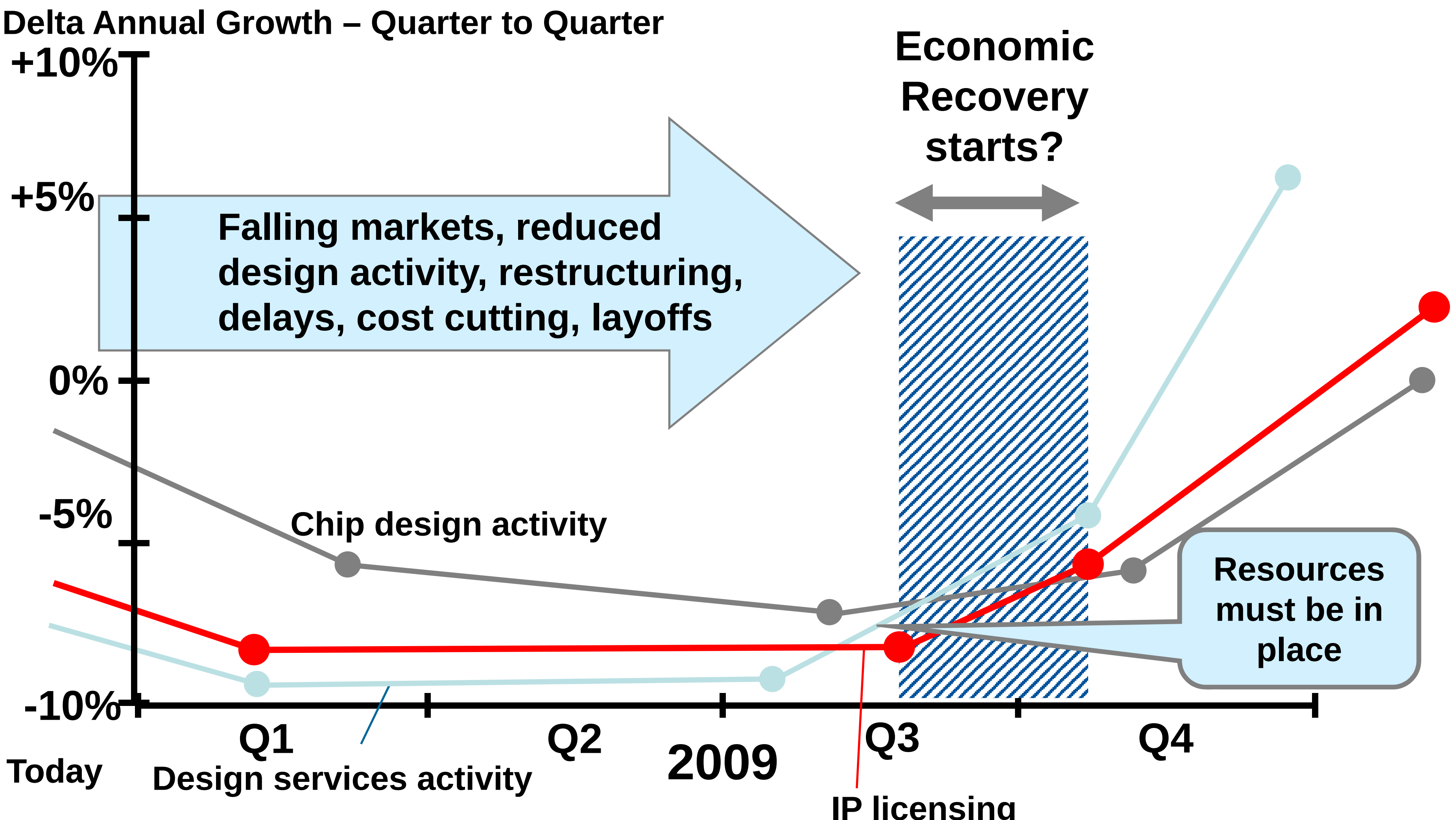


The Recession:
Design Services and IP will Recover Quickly



Note: Revenue patterns may be different from Activity patterns

IP in 2009

- Impact of the Downturn:
  - Semiconductor industry: maturing growth plus a squeeze between falling prices and rising design costs
  - The downturn and shift in funding methods will drive structural change – consolidation is inevitable
  - IP and design services are increasingly central to leaner semiconductor model - will lead industry out of recession and continue to outgrow semiconductor industry
- Semiconductor and OEMs own significant algorithm, hardware and software IP, but not likely to productize (instead “focus on core business”). Will seek ways to better leverage and proliferate algorithm know-how internally
- Winning positioning themes:
  - "we can help you cut costs"
  - “we can help you innovate”
  - “we can help you reuse and leverage your core competencies”

A Quick Closing Thought

- EDA/IP Industry looking at some challenging quarters
- Moore's law says "Integrate or Die". The underlying value proposition for EDA and IP remain very strong as we enable that integration
- A period of rich innovation: "Necessity is the mother of invention" for new business models, advanced tools, differentiated IP
- I am touched by the commitment of suppliers, partners, and customers to jointly cope with the upheaval. We will be a stronger industry community as a result.