



EDM EVENT 2013 :

**“THE BUSINESS IMPACT OF CENTER FOR
ELECTRONICS DESIGN & MANUFACTURING”**

October 4th 2013, Leuven



CONTEXT

- ▶ Semiconductor technology is ubiquitous
- ▶ Semiconductor growth is shifting from telecom, mobile and computing segments into industrial, security, medical, datacom, automotive, optical, ...
- ▶ In those segments, SME's emerge who want to apply ASICs but typically do not have the needed depth and quality of semiconductor knowhow
- ▶ The fast move of silicon technology has created a gap between the large foundries and those SME's
- ▶ This created the opportunity for the intermediate company, called VCA (value chain aggregator, as further described in this presentation), that bridges the gap between the SME's and the semiconductor supplier eco system

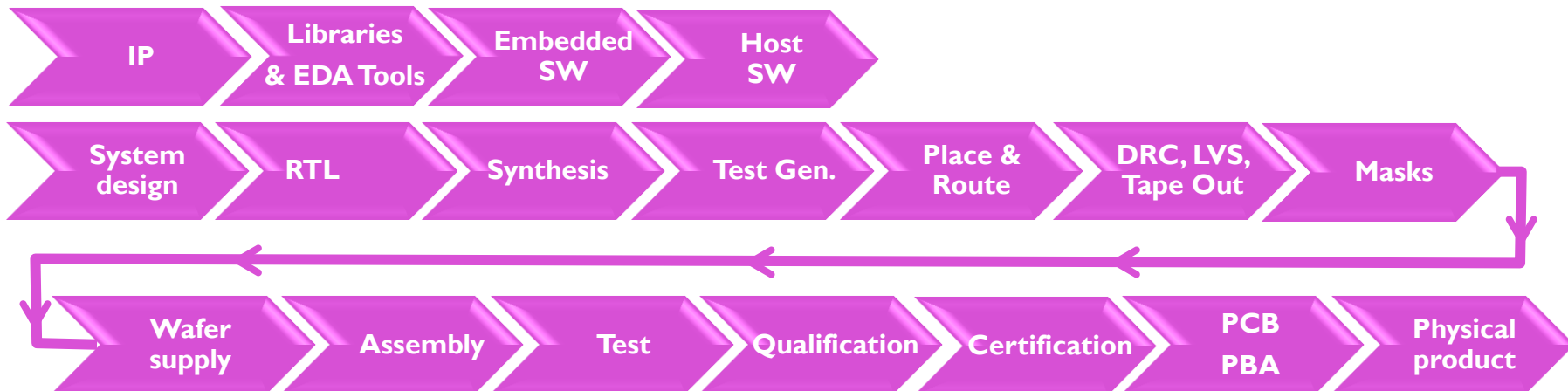
WHAT THE SME'S NEED

- ▶ A one stop shop with competency in those aspects of the semiconductor value chain (including the PCB/PBA aspects) that they do not master themselves
- ▶ Access to leading edge technology at affordable cost
- ▶ Prototyping with MPW and MLM
- ▶ Advice in technology selection
- ▶ Flexibility in business model : from COT to FTK
- ▶ Logistics and operation support
- ▶ Assembly, test and certification services
- ▶ Need for PCB/PBA technology and design know how
- ▶ Access to PCB/PBA manufacturing
- ▶ Access to leading edge IP

THE CONCEPT OF VCA “VALUE CHAIN AGGREGATOR”



- ▶ Offering to SME's all elements of the semiconductor value chain
- ▶ A VCA has own services in-house, but mostly act as an intelligent distributor with strong technical support
- ▶ Flexible business model (from COT to Full Turn Key)



IMEC SERVICES

EXECUTING ITS ROLE AS VCA

- ▶ >20 years of experience running Europractice
- ▶ VCA for TSMC since 2007
- ▶ Doing >500 IC tape outs per year
- ▶ Providing today silicon to 300 SME's
- ▶ Serving 700 universities and research institutes
- ▶ Executing 35 place & routes [=backend design services] per year
- ▶ 50 EDM partner/members, 61 associated cEDM members and >300 cEDM customers
- ▶ Network of partners (Foundries, EDA vendors, IP vendors, packaging and test houses, ASIC design houses, cEDM partners) and well embedded in the European Clusters

IMEC SERVICES



TSMC VCA Partner



Aerospace services



**Backend
Design
Services**



PCB/PBA Services

**Technology
Targeting
Services**

