



# Nanoelectronic Forum

Berlin, December 1, 2015

EU Applications & Semiconductor Technology **Roadmap**

*- A Call to Action*

CayaK InnoV - Dr. Patrick CORSI



# Why a EU semiconductor roadmap?



why should the EU semiconductor industry be concerned?

why should EU system integrators enter the game from upstream?



# The cost of non-roadmapping



if uncoordinated, EU industry at large will lose grip with global trends

but «double unknown» roadmapping is an uncharted territory



## 3 huge opportunities for system integrators



1. to bear limited risks  
while both markets and techs are unknown
2. to multiply market potential
3. to attain economies of scale, scope,  
across ecosystems



## **with a method (example)**

ask what several emerging markets may have in common

functions? technologies? performance level? what can be specified?

take n applications, look for common properties

independently from specific environments constraints



**through workshops**

**collecting knowledge across domains**

**exploring the generic functions**

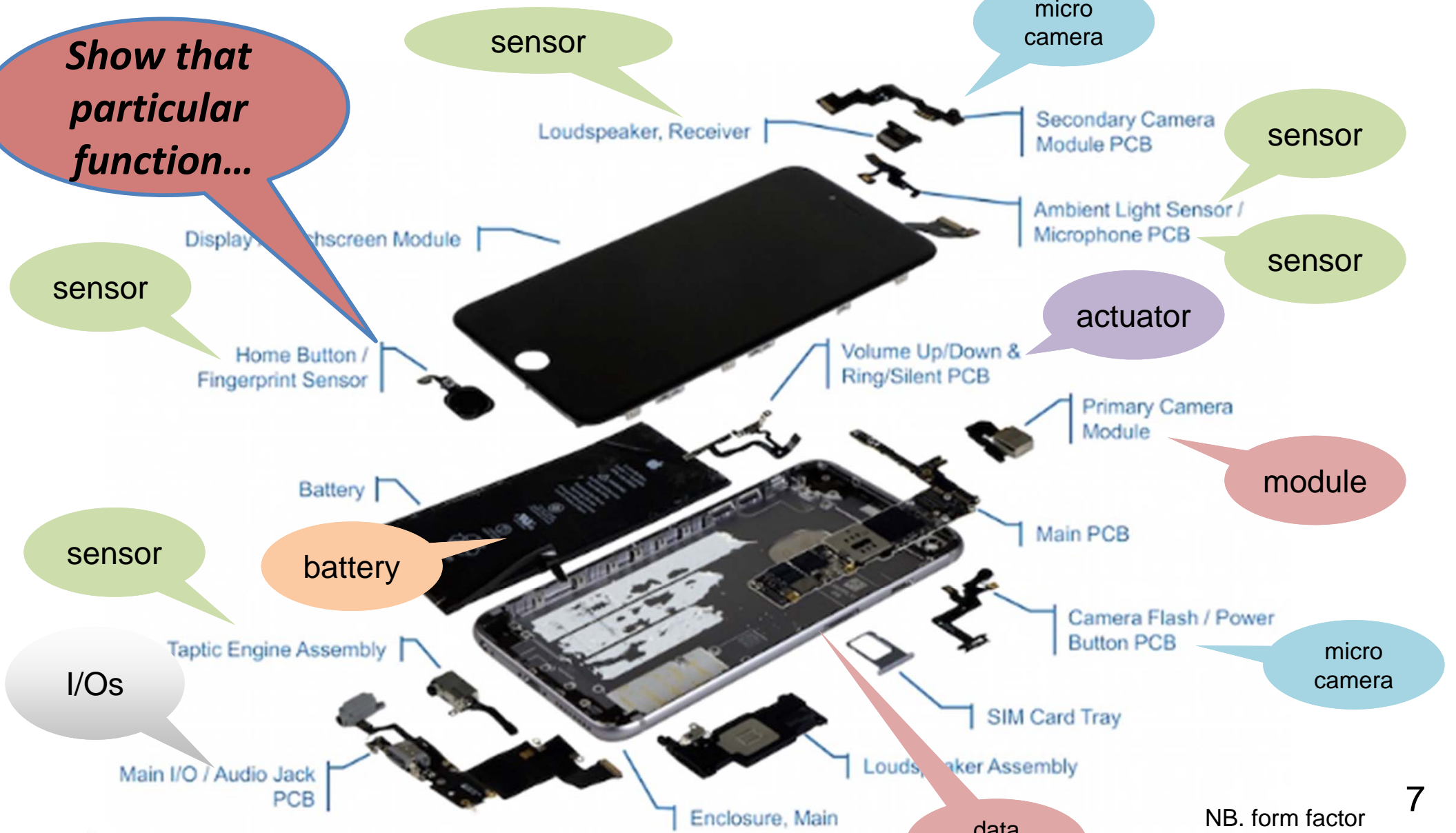
**tackling a «double unknown» approach  
technology-markets**



# Which iPhone 6 macro components could be generic?



*Show that particular function...*



NB. form factor is always device/application dependent

# Canvass I



GENERIC FUNCTIONS >	Sensing	Actuating	Energy management	Communications	Etc.
PULL SIDE - KEY APPLICATIONS					
Automotive					
Energy					
Health					
Communications					
Intelligent Transportation					
Smart Production					
Smart Cities					
Safety					

**Which requirements  
from which  
applications?**



# Canvass II



<b>PUSH SIDE &gt;</b> <b>Essential Capabilities</b>	<b>Beyond CMOS</b>	<b>Advanced logic &amp; Connectivity</b>	<b>Functional diversification</b>	<b>System design &amp; Heterogeneous integration</b>	<b>Equipment &amp; Manufacturing science</b>
<b>GENERIC FUNCTIONS</b>					
<b>Sensing</b>					
<b>Actuating</b>					
<b>Energy management</b>					
<b>Communications</b>					
<b>Etc.</b>					

*Which requirements for which generic functions?*

think cross-application domains

think generic technologies

collaboratively, at precompetitive stage



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Questions welcome - Cayak InnoV - Dr. Patrick CORSI

