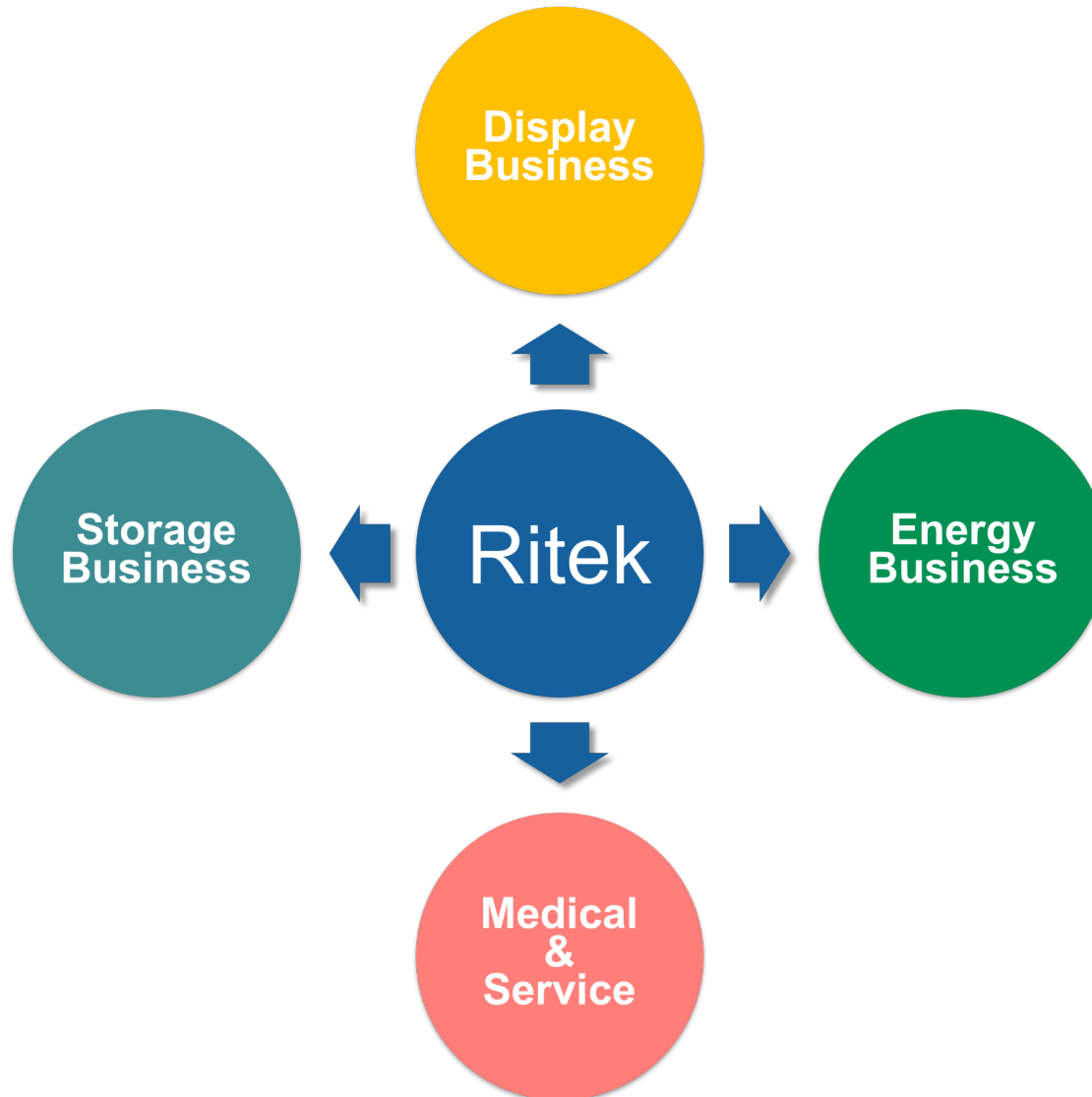




Ritek operation and development

Date: 09, 27h, 2017

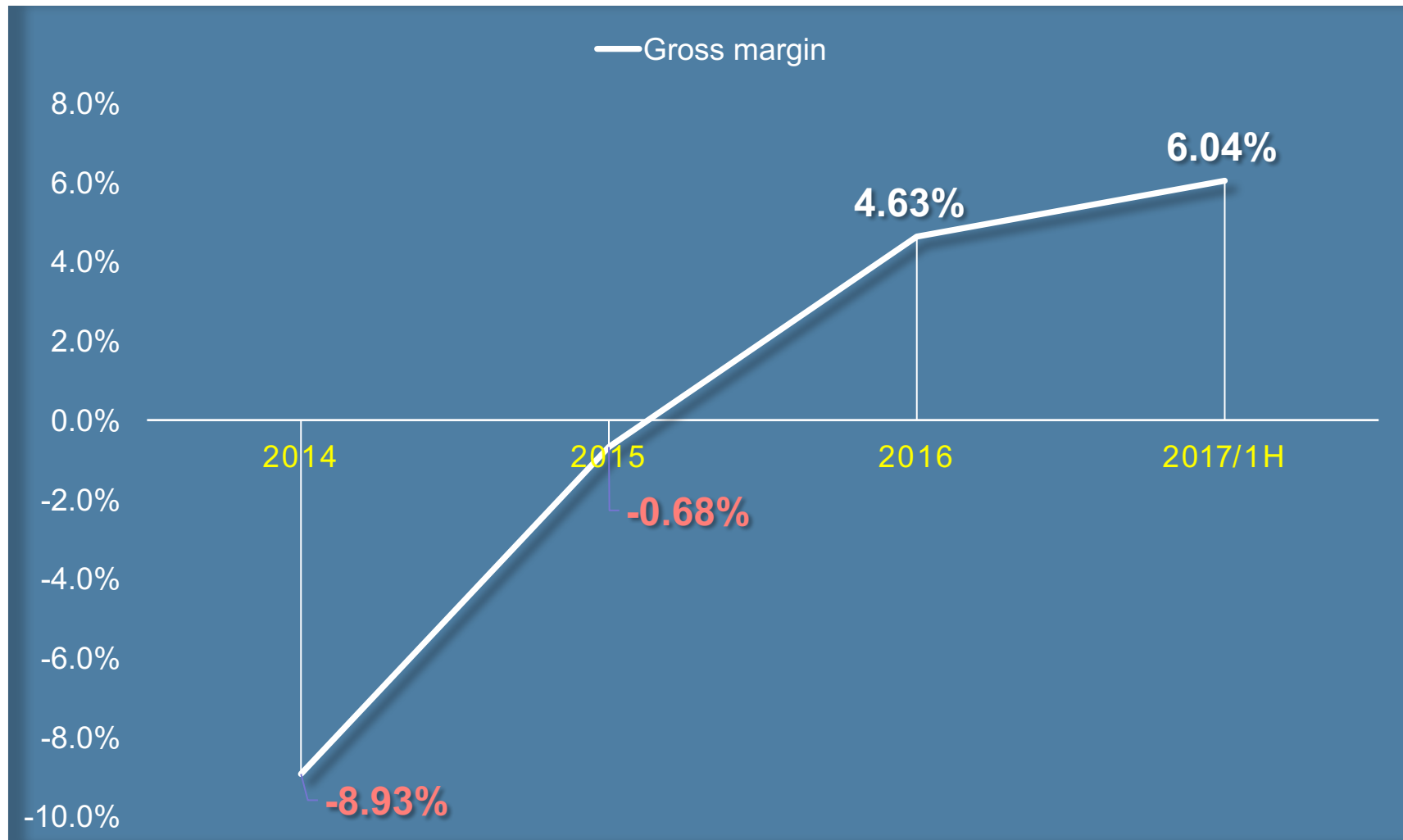
Ritek's main business units



Ritek global deployment



Reformat product mix to improve gross margin



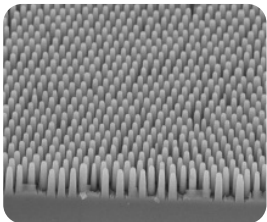
Expanding new business from Ritek core technology

RITEK Transformation



Disc

Semiconductor
appliance



Nano
Imprint

Bio Disc



OLED
Display

OLED
Lighting



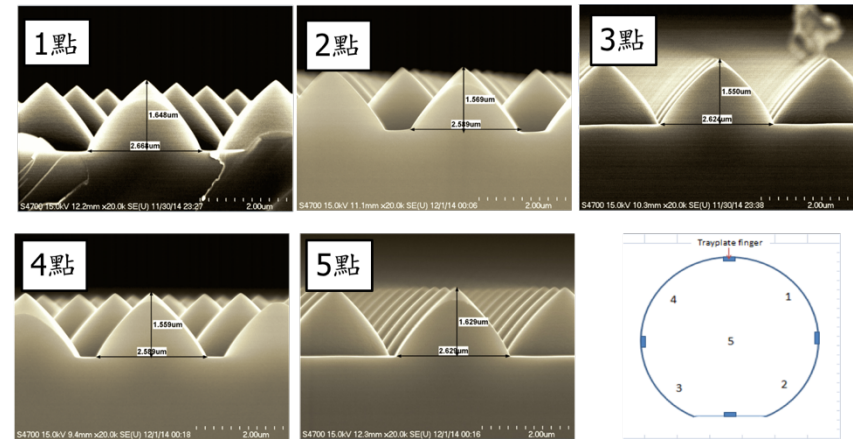
The development of
new business

new business

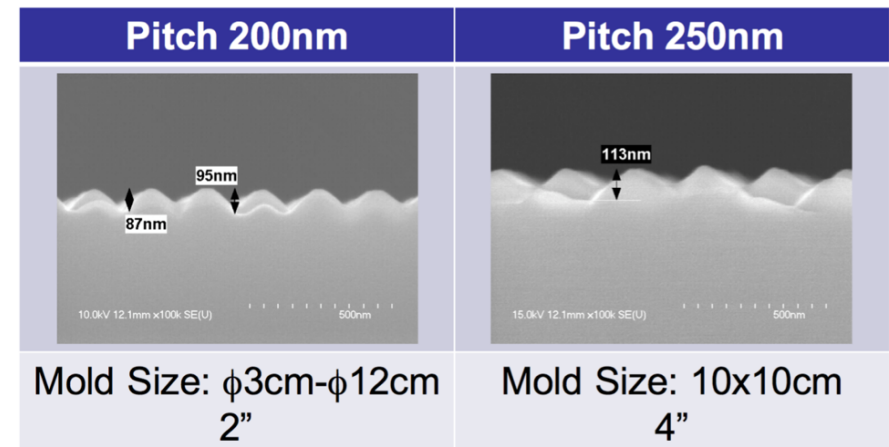
Nanoimprint technology

- ☑ LED PSS is Ritek's first product to expand Nanoimprint technology.
- ☑ Currently, it has Consisted shipment, and market differentiation is be created. Nanoimprint technology will be the best solution as if lager size and miniaturization trend in LES PSS products.
- ☑ Short-term goal: The major products will be optical and optical lens products with Nanoimprint technology to construct dozens to hundreds of nanometer size of the microstructure, to make the structural for anti-reflective, anti-oil and optical fingerprint identification.
- ☑ Medium-term goal: Use Nanoimprint technology to produce optical waveguide and diffractive components products, which will apply to AR (amplification of real) products; or the use of imprinting production Micro lens in optical lens applications.
- ☑ Long-term goal: Use Nanoimprint technology to produce special size structure of the medical chip ◦

6" Imprint PSS Products



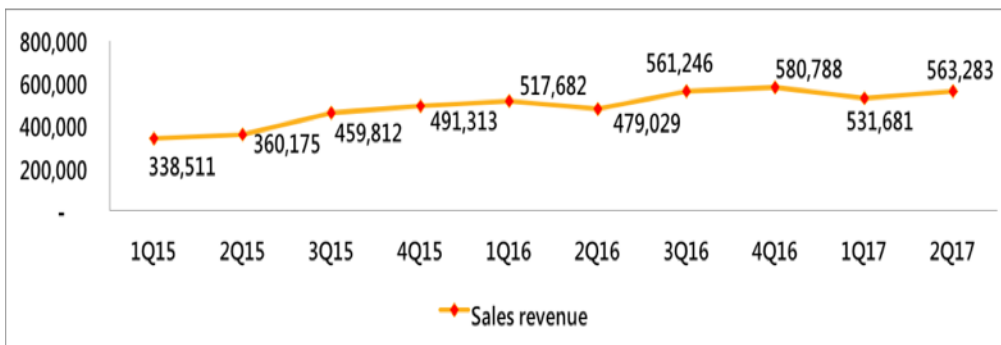
Moth-eye structure



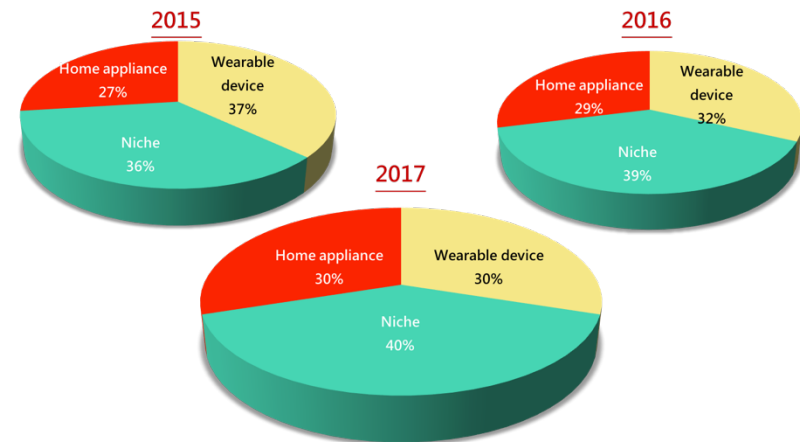
OLED

Income Statement

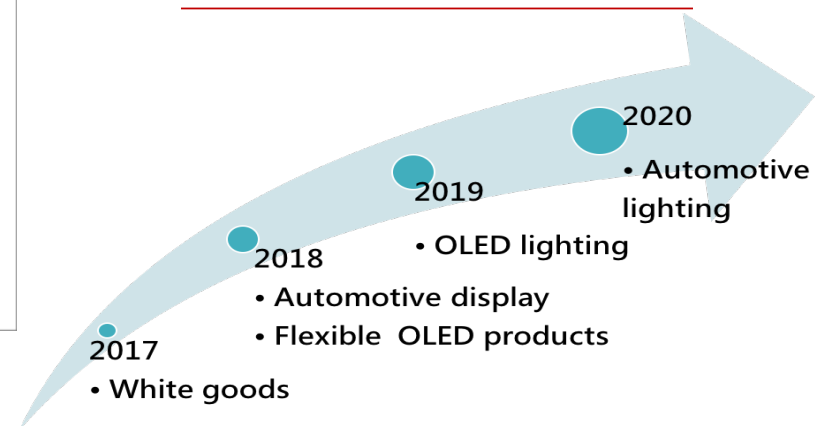
(In NTD thousands, except EPS)	2015		2016		20171H	
	Amount	%	Amount	%	Amount	%
Sales revenue	1,649,811	100	2,138,745	100	1,094,964	100
Cost of goods sold	(1,346,850)	(82)	(1,617,403)	(76)	(803,410)	(73)
Gross profit	302,961	18	521,342	24	291,554	27
Operating expenses	(170,111)	(10)	(273,054)	(12)	(130,833)	(12)
Net operating income	132,850	8	248,288	12	160,721	15
Non-operating income and expenses	(2,970)	-	87,726	3	39,245	4
Net income before tax	129,880	8	336,014	15	199,966	19
Tax expense	(9,312)	(1)	(5,209)	-	(18,120)	(2)
Net income	120,568	7	330,805	15	181,846	17



Product sales ratio



The future of PMOLED



Bio Disc

STEP 1

Prepare the disc



STEP 2

Collect Blood Sample &
Introducing sample into the disc



STEP 3

Insert DISC into the instrument



STEP 4

Read results on the screen

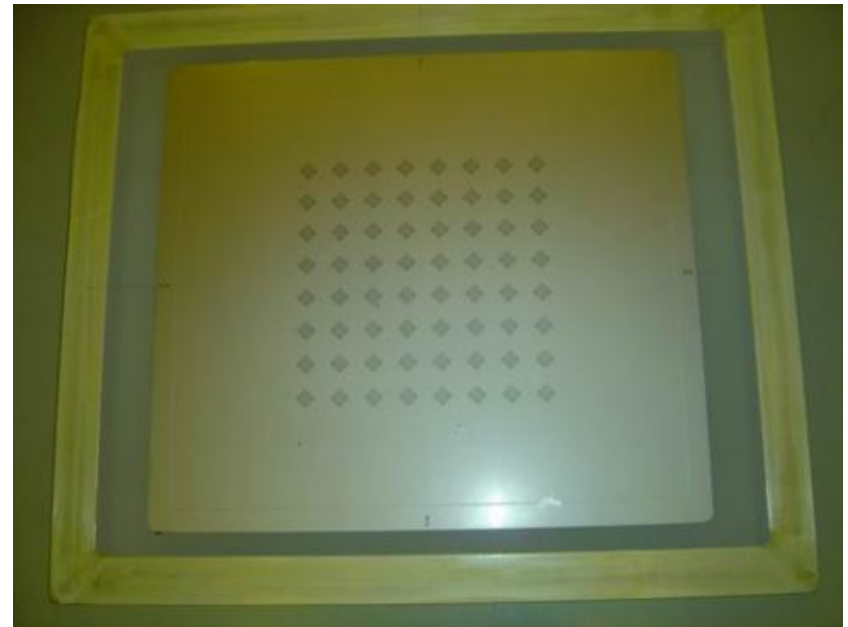


Semiconductor appliance

solder ball stencil



IC substrate (pinting stencil)



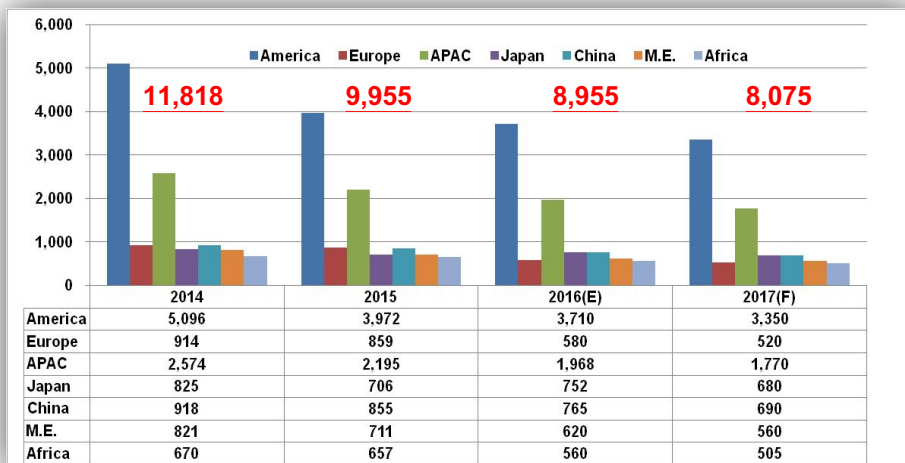
- ☑ Currently, Ritek has a leading technology in the high-end market of semiconductor devices
- ☑ Major customers are the domestic and international first-tier semiconductor packaging plants.
- ☑ Revenue has grown significantly over last year, and has the opportunity to keep growing next year.

Optical Disc market transfer

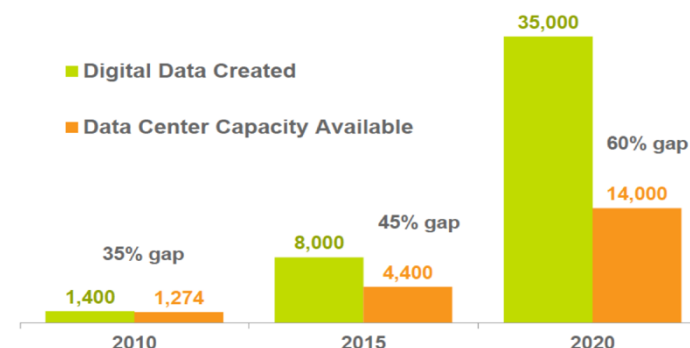


- ☑ In 2017, the demand of Optical Disc in consumer market is around 8 billion.
- ☑ Each single market has its own characters, thus the speed of the market decrease are different, which around 12-15%.
- ☑ The estimated of market demand of 2020 will be around 6 billion. In Developed countries will be around 37%, emerging markets will be around 63%.
- ☑ The demand in emerging markets is decreasing slowly
- ☑ We believe the market will have certain size of the demand.

- ☑ In the data center, the needs of the supply and demand will have a huge gap between supply & demand.
- ☑ The demand of high capacity optical disc is going to be rise!
- ☑ According to Gartner who is a global authoritative analyst estimates, there will be more than 40,000 EB data in 2020.
- ☑ For example 1% out of 40,000 EB will use BD 100GB for archive, there would be 4.2B discs consumption



資料來源：鍊德整理



Source: IDC Digital Universe Study, 2011

Sharing The Right Technology



Thank you