

EPISTAR 晶電2448



Actualize LED Potential



..... Co-activation Service Model

..... Full Spectrum LED Chips Portfolio

..... Chip Solution for Various Applications

2018.05.23 update

免責聲明

These presentation materials include forward-looking statements that are subject to significant risks and uncertainties and actual results may differ materially from those contained in the forward-looking statements.

The factors that could cause actual results including, but not limited to current uncertainty in global market conditions, our development in new technologies and products, our ability to lower costs, the complexity of our manufacturing processes, the availability of raw materials, and the difficulties of estimating future market demand.

Our industry and business are constantly evolving and we undertaking no obligation to update any forward-looking statements, whether as a result of new information, future events, or otherwise.

基本介紹

成立時間：1996年

董事長：李秉傑 博士

總經理：周銘俊 博士

資本額：109億台幣

產品線：

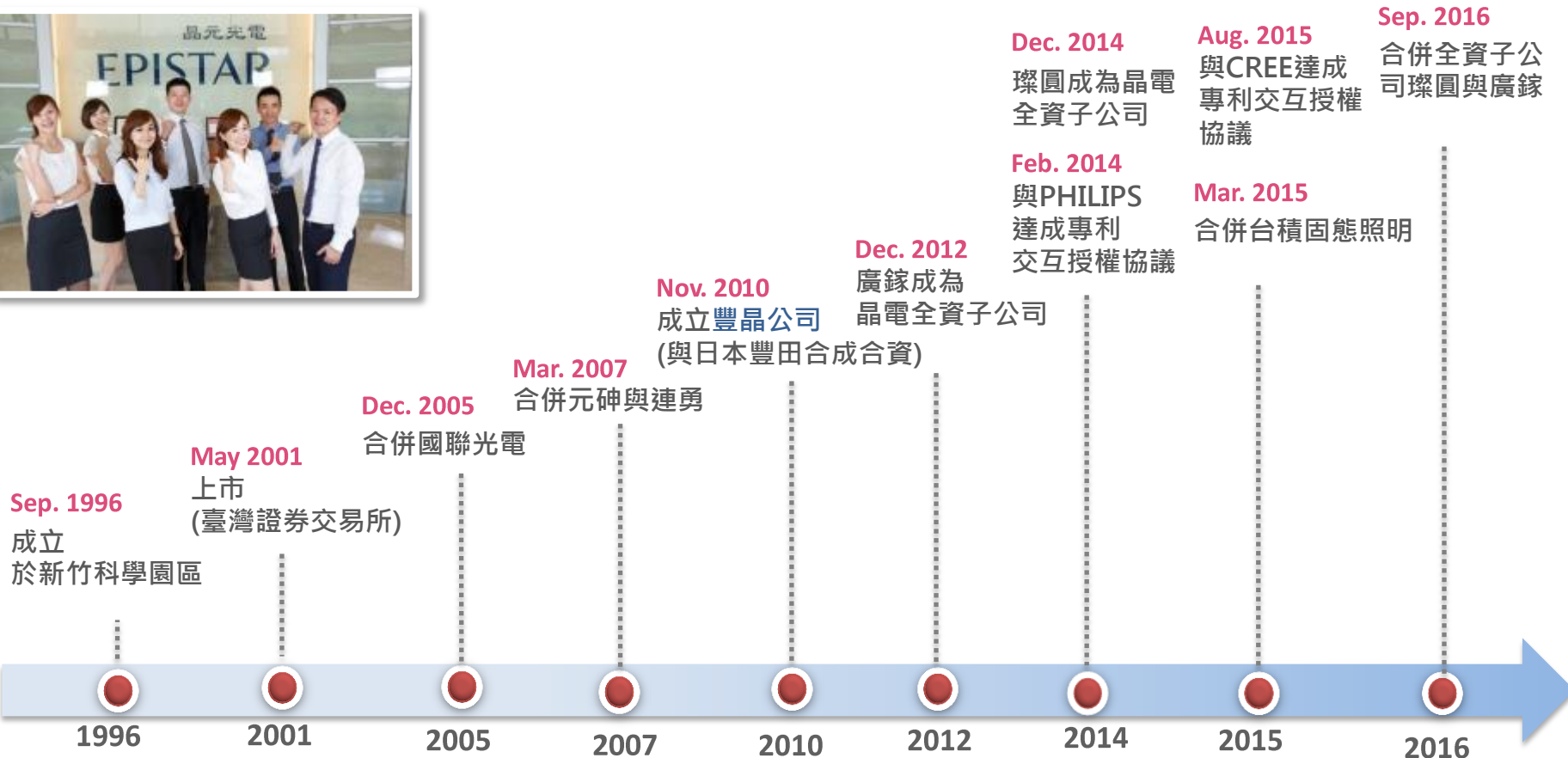
- 四元(紅黃光)LED磊晶片及晶粒
- 氮化物(藍綠光)LED磊晶片及晶粒
- 紫外線/紅外線LED晶粒
- 面射型雷射(VCSEL)代工服務
- HCPV 太陽能晶片

員工數：3,897人(截至2018年4月)



發展沿革與重要事蹟

公司重要事蹟



市場概況及前景

- Oversupply due to recent China expansion
- 2nd quarter is soft due to weak BLU and lighting demand
- Expect to rebound for 3rd quarter after pipeline inventory is consumed
- Auto, IR, horticulture and colored LED continue to be strong
- Mini-LED starts to take off in the 2nd half

LED過去三大主流應用



晶電LED業務成長引擎及策略

- Lighting
 - Filament (IP), Tube (high performance), CSP (commercial & outdoor lighting), and horticulture (WPE)
- Automotive
 - Exterior (R&Y) & interior (RGB), DRL, Headlamp (design in) and IR (sensing)
- Signage (Display)
 - Ultra-fine pitch display, RGB (high brightness & uniformity)
- Mini & Micro-LED

晶電在Mini及Micro-LED的優勢競爭力

- Efficiency: Best red performance, excellent green brightness
- Uniformity: std dev. for 4" & 6" wafer less than 1 nm
- Unique chip structure for optimized BLU design
- Capable of different design (lateral, vertical & flip chip) for customized applications
- Strong connection to end customers

Actualize LED Potential



Actualize III-V Semiconductor Potential

III-V族半導體之各應用領域

LED

Illumination
Signals
Automotive
Mobile Application

Laser Diodes

Optical Storage
Industry Medical
Projector
Image Sensor

Power

PFC/Power Supply
PV Inverter
Motor Control
EV/HEV
UPS
Wind Mills
Rail Transport.

RF Electronic

5G, Wireless charger

Acoustic wave

BAW Device
Mobile phone

Mendelevium																					
Supply risk: High supply risk (Red), Medium supply risk (Yellow), Low supply risk (Green), Unknown (Grey)																					
H	Mendelevium																He				
Li	Be	Key isotopes: ²⁵⁸ Md, ²⁶⁰ Md														B	C	N	O	F	Ne
Na	Mg	Electron configuration: [Rn] 5f ¹³ 7s ²														Al	Si	P	S	Cl	Ar
K	Ca	Density (g cm ⁻³): Unknown														Ga	Ge	As	Se	Br	Kr
Rb	Sr	1 st Ionisation energy: 634.870 kJ mol ⁻¹														In	Sn	Sb	Te	I	Xe
Cs	Ba	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Tl	Pb	Bi	Po	At	Rn				
Fr	Ra	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	Pb	Bi	Po	At	Rn					
		La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn				
		Ac	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og				
		Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu						
		Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr						

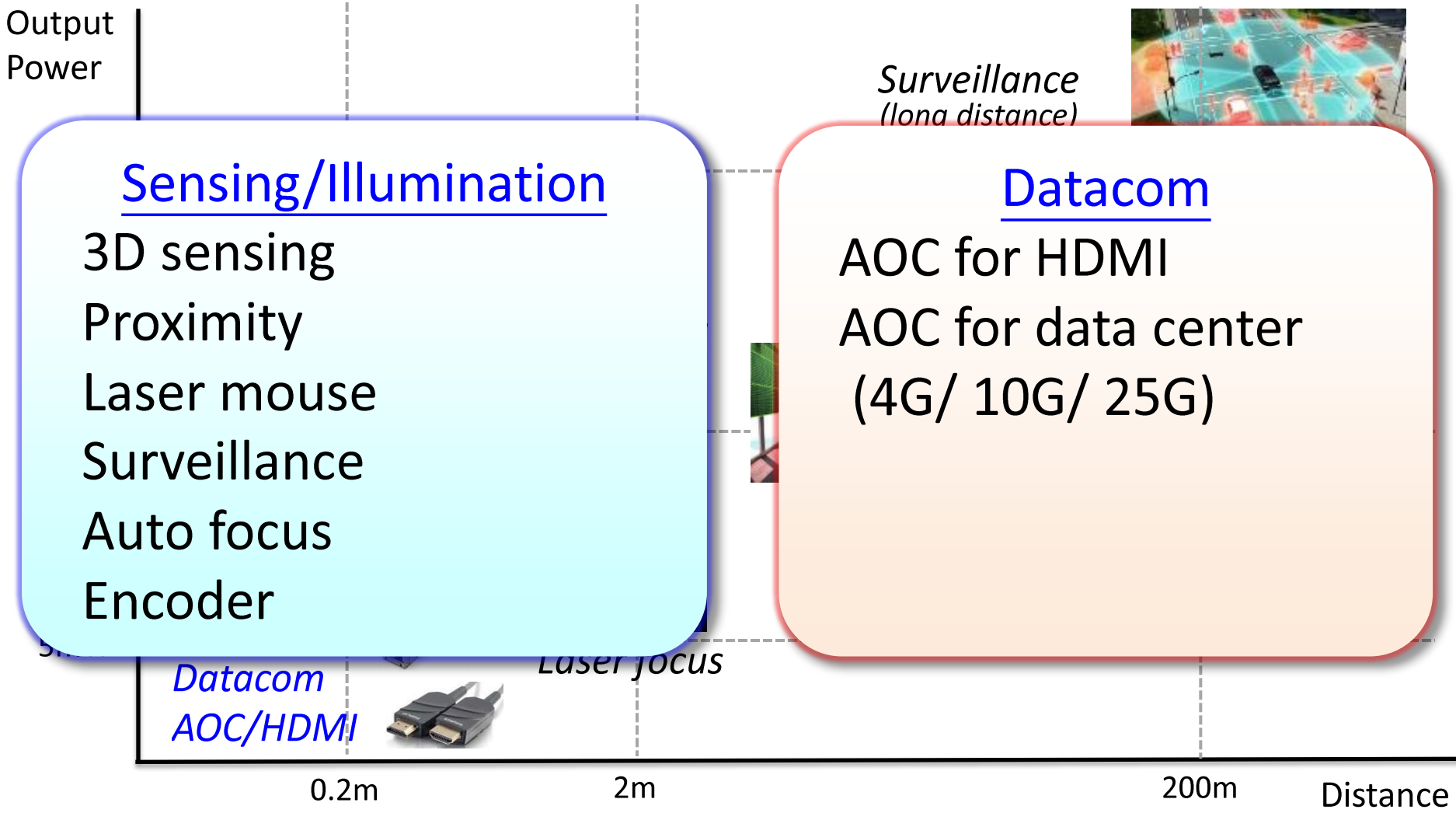
III-V族成長動能

- Future Display (Mini-LED/Micro-LED)
- New Generation Smart Car – GaN Power/LiDAR
- IoT –/Sensor/Power Module
- 5G World – Solar Cell/BAW....
- 3D Sensing, VR/AR – VCSEL
- AI & Deep Learning
-

ES Semiconductor : Foundry Business

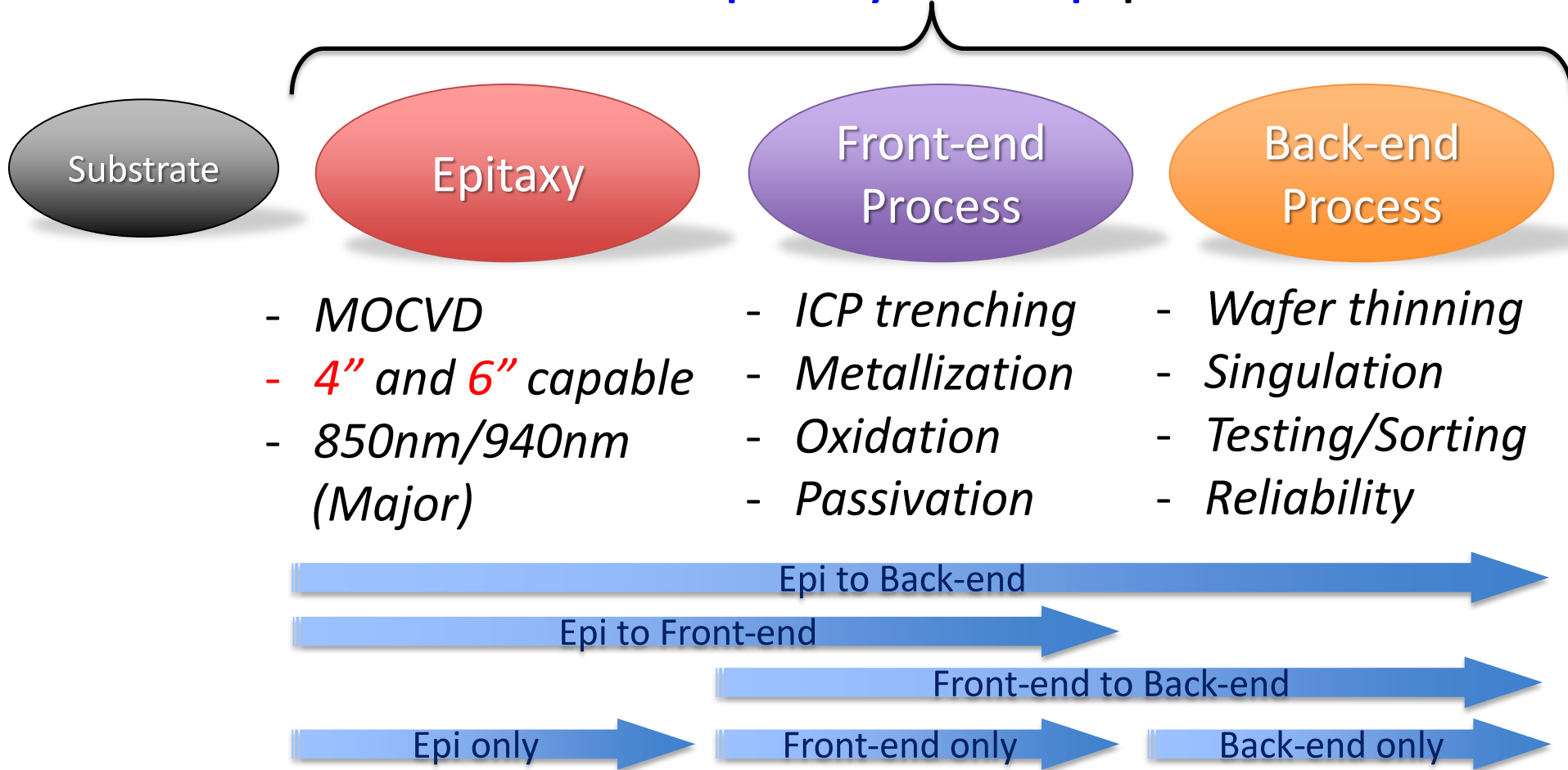
晶電半導體：代工事業

垂直共振腔面射型雷射之應用

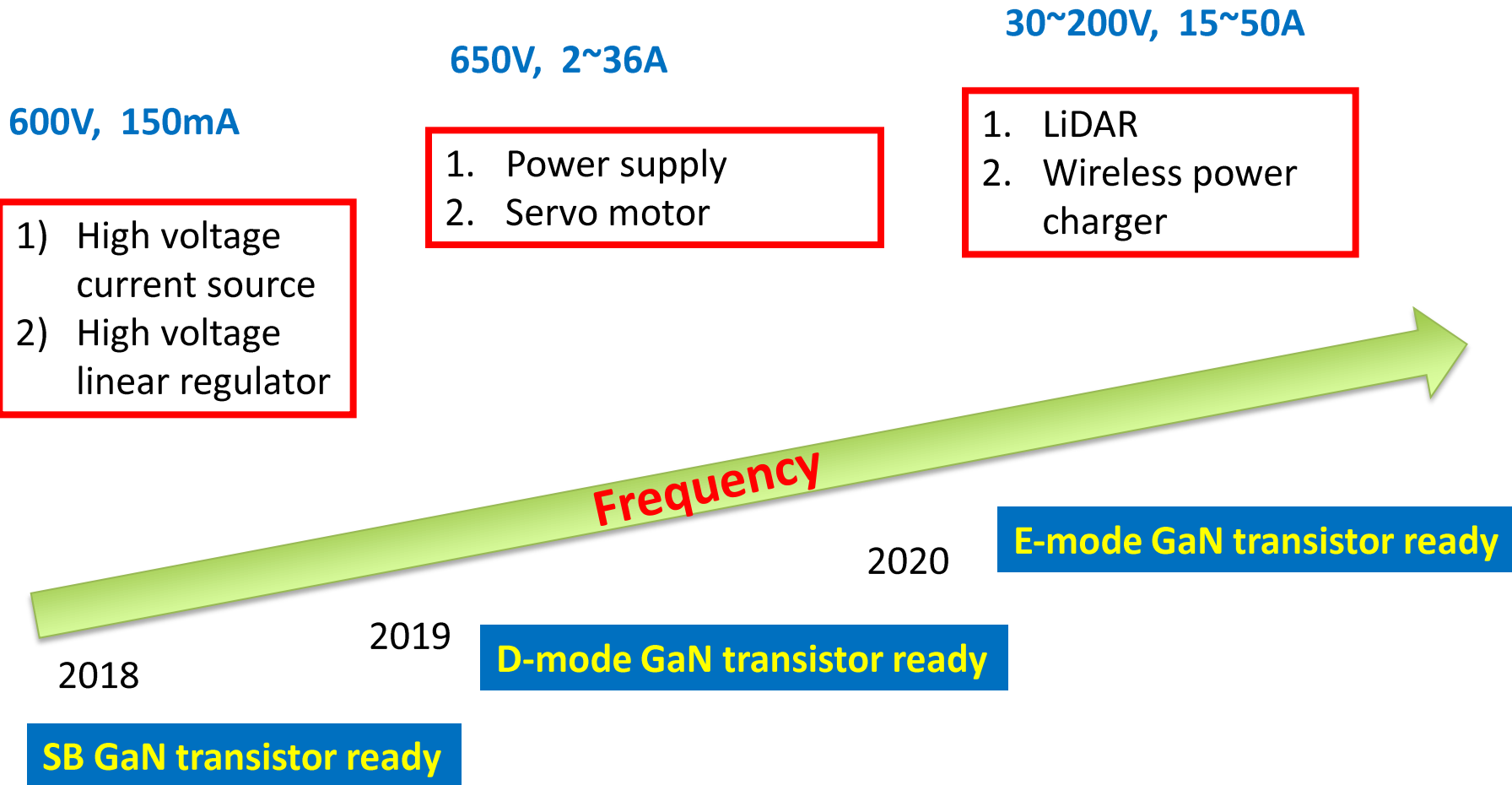


晶電代工模式 – 提供整合性的代工服務

From **epitaxy** to **chip** process



氮化鎵電晶體之應用藍圖



晶電代工事業之競爭力

- Only company capable of full foundry service (epi and chip)
- Only company with significant built-in epi capacity
- Excellent track record for foundry service (ex. epi for datacom)
- Proprietary know-how for a variety of different materials (AlGaAs, GaN,...)

轉型推動未來之成長

- Transform Epistar group from LED focus to III-V semiconductor focus
- Based on Epistar core competencies
- Address end customer/application needs
- Expand business scope and drive for sustainable profitability

Embrace the Change for a Better Future!

擁抱變革， 迎向美好未來！

資產負債表主要科目

單位：新台幣十億元	2018.03.31		2017.12.31		2017.03.31	
資產負債表項目	金額	%	金額	%	金額	%
約當現金及有價證券	5.5	8.3%	7.2	10.7%	5.4	8.1%
應收帳款	11.4	17.2%	11.3	16.9%	10.1	15.1%
存貨	5.4	8.1%	4.8	7.2%	4.6	6.9%
長期投資	2.6	3.9%	2.8	4.2%	2.8	4.2%
固定資產淨額	24.0	36.2%	24.3	36.3%	26.2	39.1%
資產總額	66.3	100.0%	67.0	100.0%	67.0	100.0%
流動負債	9.4	14.2%	9.7	14.5%	9.2	13.7%
長期計息負債	0.7	1.1%	2.1	3.1%	5.0	7.5%
負債總額	12.4	18.7%	14.0	20.9%	16.4	24.5%
股東權益總額	53.9	81.3%	53.0	79.1%	50.6	75.5%

2018年第一季與2017年第四季損益比較

	1Q 2018		4Q 2017		QoQ	
	金額	%	金額	%	金額	%
單位：新台幣佰萬元						
營業收入	5,148	100.0	5,937	100.0	(789)	(13.3)
營業毛利	886	17.2	1,284	21.6	(398)	(31.0)
營業費用	(812)	(15.7)	(921)	(15.5)	(109)	(11.8)
其他收益及費損	53	1.0	54	0.9	(1)	(1.9)
營業利益	127	2.5	417	7.0	(290)	(69.5)
淨外幣兌換利益或損失	(44)	(0.9)	(79)	(1.3)	(35)	(44.3)
利息費用	(41)	(0.8)	(88)	(1.5)	(47)	(53.0)
其他營業外收入及支出	65	1.3	(12)	(0.2)	77	641.7
稅前損益	107	2.1	238	4.0	(131)	(55.0)
稅後損益	378	7.3	363	6.1	15	4.1
每股盈餘(NT\$)	0.37		0.37		0.00	0.0

2018年與2017年損益比較

單位：新台幣佰萬元	2018 1Q		2017 1Q		YoY	
	金額	%	金額	%	金額	%
營業收入	5,148	100.0	5,731	100.0	(583)	(10.2)
營業毛利	886	17.2	1,131	19.7	(245)	(21.7)
營業費用	(812)	(15.7)	(766)	(13.4)	46	6.0
其他收益及費損	53	1.0	52	0.9	1	1.9
營業利益或損失	127	2.5	417	7.3	(290)	(69.5)
淨外幣兌換利益或損失	(44)	(0.9)	(599)	(10.5)	(555)	(92.7)
利息費用	(41)	(0.8)	(37)	(0.6)	4	10.8
其他營業外收入及支出	65	1.3	(1)	(0.0)	66	6,600.0
稅前損益	107	2.1	(220)	(3.8)	327	148.6
稅後損益	378	7.3	(284)	(5.0)	662	233.1
每股盈餘(虧損)(NT\$)	0.37		(0.26)		0.63	242.3