

環宇
芯系天下

**Q2 2017
Quarterly
Online Investor
Conference
(線上法說會)**

Aug 04, 2017



環宇通訊半導體
Global Communication Semiconductors, LLC



“Enabling Today’s Global
Communications
and Beyond”

Disclaimer Statement



This presentation includes forward-looking statements. All statements, other than statements of historical facts, that address activities, events or developments that GCS Holdings, Inc. expects or anticipates will or may occur in the future (including but not limited to projections, targets, estimates and business plans) are forward-looking statements.

GCS's actual results or developments may differ materially from those indicated by these forward-looking statements as a result of various factors and uncertainties, including but not limited to price fluctuations, actual demand, exchange rate fluctuations, market share, competition, environmental risks, change in legal, financial and regulatory frameworks, government policies, international economic and financial market conditions, political risks, cost estimates and other risks and factors beyond our control.

GCS does not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

Agenda



Opening:

Brian Ann, CEO & President

Financial Section:

Grace Li, Director & Special Assistant to CEO

Market Overview:

Simon Yu, Senior VP and General Manager,
Worldwide Sales & Marketing and Component
Business

Q&A: All

FINANCIAL SECTION

Statements of Comprehensive Income - QoQ



(in NT\$ thousands except EPS)

	2Q17	1Q17	2Q16	2Q17 Over 1Q17	2Q17 Over 2Q16
Net Operating Revenue	458,228	411,692	481,273	11.3%	-4.8%
Gross Profit	248,075	187,312	194,426	32.4%	27.6%
Gross Margin	54.1%	45.5%	40.4%		
Operating Expenses	(107,349)	(111,899)	(120,896)	-4.1%	-11.2%
Operating Expenses to Revenue %	23.4%	27.2%	25.1%		
Operating Income	140,726	75,413	73,530	86.6%	91.4%
Operating Margin	30.7%	18.3%	15.3%		
Non-operating Items	(55,560)	29,216	20,457	-290.2%	-371.6%
Net Income	65,995	98,264	82,563	-32.8%	-20.1%
Net Profit Margin	14.4%	23.9%	17.2%		
Basic EPS (NTD)	0.91	1.35	1.15		
Diluted EPS (NTD)	0.90	0.83	0.92		
R&D Expense % to Revenue	9.0%	10.1%	7.3%		
Legal expense related to merger (San'an)	-	-	16,734		

Note 1: 72,829,528 shares and 73,718,261 shares were used in basic EPS and diluted EPS calculation for 2Q17, respectively.

Note 2. Revenue supplemental information

	2Q17	1Q17	2Q16	2Q17 Over 1Q17	2Q17 Over 2Q16
Revenue in US\$ thousand	15,113	13,242	14,837	14.1%	1.9%
Exchange Rate	30.68	31.09	32.78		

Non-operating Income and Expenses- QoQ



(in NT\$ thousands)

	2Q17	1Q17	2Q16	2Q17 Over 1Q17	2Q17 Over 2Q16
Other Income	1,208	966	1,064	25.1%	13.5%
Other Gains and Losses					
Net Gain or (losses) on financial liabilities at fair value through profit or loss	(51,639)	59,450	10,202	-186.9%	-606.2%
Net currency exchange gain or (loss)	503	(24,279)	2,081	-102.1%	-75.8%
Gain on disposal of investment	1,357	-	14,983	-	-90.9%
Finance Cost					
Interest expense for convertible bonds (Note)	(5,485)	(5,443)	(6,116)	0.8%	-10.3%
Other interest expense	(1,504)	(1,478)	(1,757)	1.8%	-14.4%
Total Non-operating Income and Expenses	(55,560)	29,216	20,457	-290.2%	-371.6%

Note: Amortization of discount on convertible bonds

Statements of Comprehensive Income – YoY



(in NT\$ thousands except EPS)

	2017	%	2016	%	Change (%)
	Jan to June		Jan to June		
Net Operating Revenue	869,920	100.0%	945,058	100.0%	-8.0%
Operating Cost	(434,533)	-50.0%	(516,779)	-54.7%	-15.9%
Gross Profit	435,387	50.0%	428,279	45.3%	1.7%
Operating Expenses	(219,248)	-25.2%	(263,353)	-27.9%	-16.7%
Operating Income	216,139	24.8%	164,926	17.5%	31.1%
Non-operating items	(26,344)	-3.0%	(51,689)	-5.5%	-49.0%
Income before Income Tax	189,795	21.8%	113,237	12.0%	67.6%
Income Tax	(25,536)	-2.9%	(13,777)	-1.5%	85.4%
Net Income	164,259	18.9%	99,460	10.5%	65.2%
Basic EPS (NTD)	2.25		1.40		
Diluted EPS (NTD)	2.22		1.37		
Average Exchange Rate-USD/NTD	30.68		32.78		
R&D expense % to Revenue	9.52%		9.01%		
ROA (%)	12.19%		8.37%		
ROE (%)	15.62%		11.25%		
Legal expense related to merger (San'an)	-		34,895		

Note 1: 72,916,890 shares and 73,875,225 shares were used in basic EPS and diluted EPS calculation for 1H17, respectively.

Note 2. Revenue supplemental information

	Jan to Jun/2017	Jan to Jun/2016	Change (%)
Revenue in US\$ thousand	28,355	28,830	-1.6%
Exchange Rate	30.68	32.78	

Non-operating Income and Expenses- YoY



(in NT\$ thousands)

	2017 Jan to June	2016 Jan to June	Change (%)
Other Income	2,174	1,587	37.0%
Other Gains and Losses			
Net Gain or (losses) on financial liabilities at fair value through profit or loss	7,811	(45,868)	-117.0%
Net currency exchange gain or (loss)	(23,776)	(5,142)	362.4%
Gain on disposal of investment	1,357	14,983	-90.9%
Finance Cost			
Interest expense for convertible bonds (Note)	(10,928)	(13,606)	-19.7%
Other interest expense	(2,982)	(3,643)	-18.1%
Total Non-operating Income and Expenses	(26,344)	(51,689)	-49.0%

Note: Amortization of discount on convertible bonds

Balance Sheet Highlight & Key Indices



Selected Items from Balance Sheet

(in NT\$ thousands)

	2Q17		1Q17		2Q16	
	Amount	%	Amount	%	Amount	%
Cash and Cash Equivalent	1,288,575	45%	1,259,062	44%	1,290,712	46%
Available-for-Sale Financial Assets-Current Asset	42,711	2%	-	-	41,668	2%
Accounts Receivable	242,033	8%	228,471	8%	267,013	9%
Inventory	342,131	12%	333,501	12%	358,027	13%
Available-for-Sale Financial Assets-Non current	-	-	64,906	2%	22,539	1%
Investments accounted for under the Equity Method	14,906	1%	-	-	-	-
Net Property, Plant and Equipment	505,528	17%	451,655	16%	499,573	18%
Deferred Tax Assets	200,743	7%	200,149	7%	200,534	7%
Total Assets	2,896,661	100%	2,829,248	100%	2,822,885	100%
Short Term Loan	20,000	1%	20,000	1%	-	-
Financial Liabilities at Fair Value through Profit and Loss	58,671	2%	11,508	0%	129,012	4%
Accounts Payable and Other Payables	202,137	7%	153,759	6%	193,393	7%
Bond Payable - Current Portion	253,655	9%	331,260	12%	-	-
Long Term Bank Borrowings - Current Portion	19,397	1%	19,145	1%	19,697	1%
Bonds Payable (Non-current)	-	-	-	-	345,332	12%
Long Term Bank Loans	87,461	3%	92,113	3%	115,057	4%
Total Liabilities	758,595	26%	771,738	27%	929,767	33%
Total Stockholders' Equity	2,138,066	73%	2,057,510	73%	1,893,118	67%

Key Indices

Current Ratio	336%	313%	529%
Debt Ratio	26%	27%	33%
AR Turnover Days	49	50	46
Inventory Turnover Days	179	172	147

Cash Flows

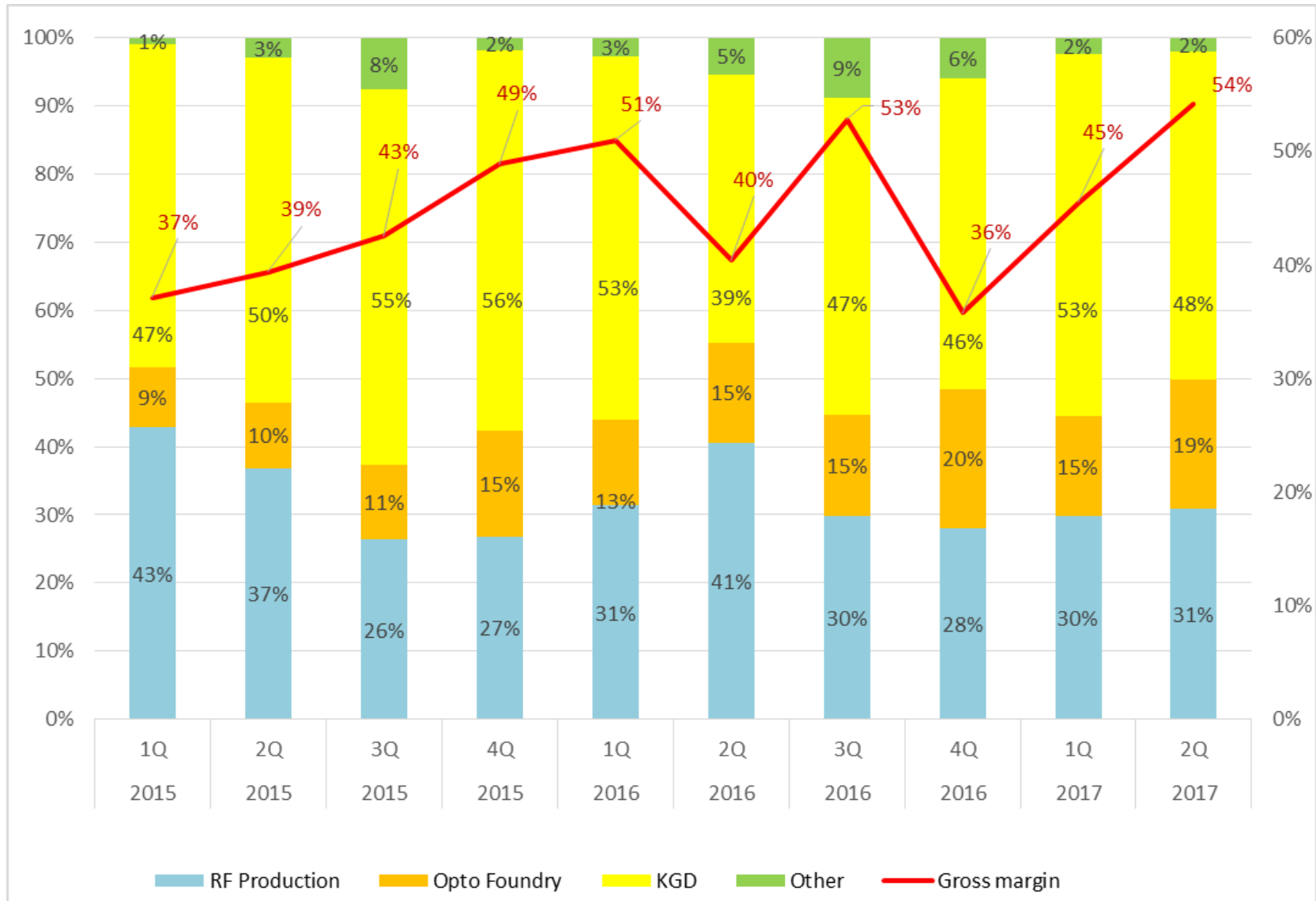


(in NT\$ thousands)

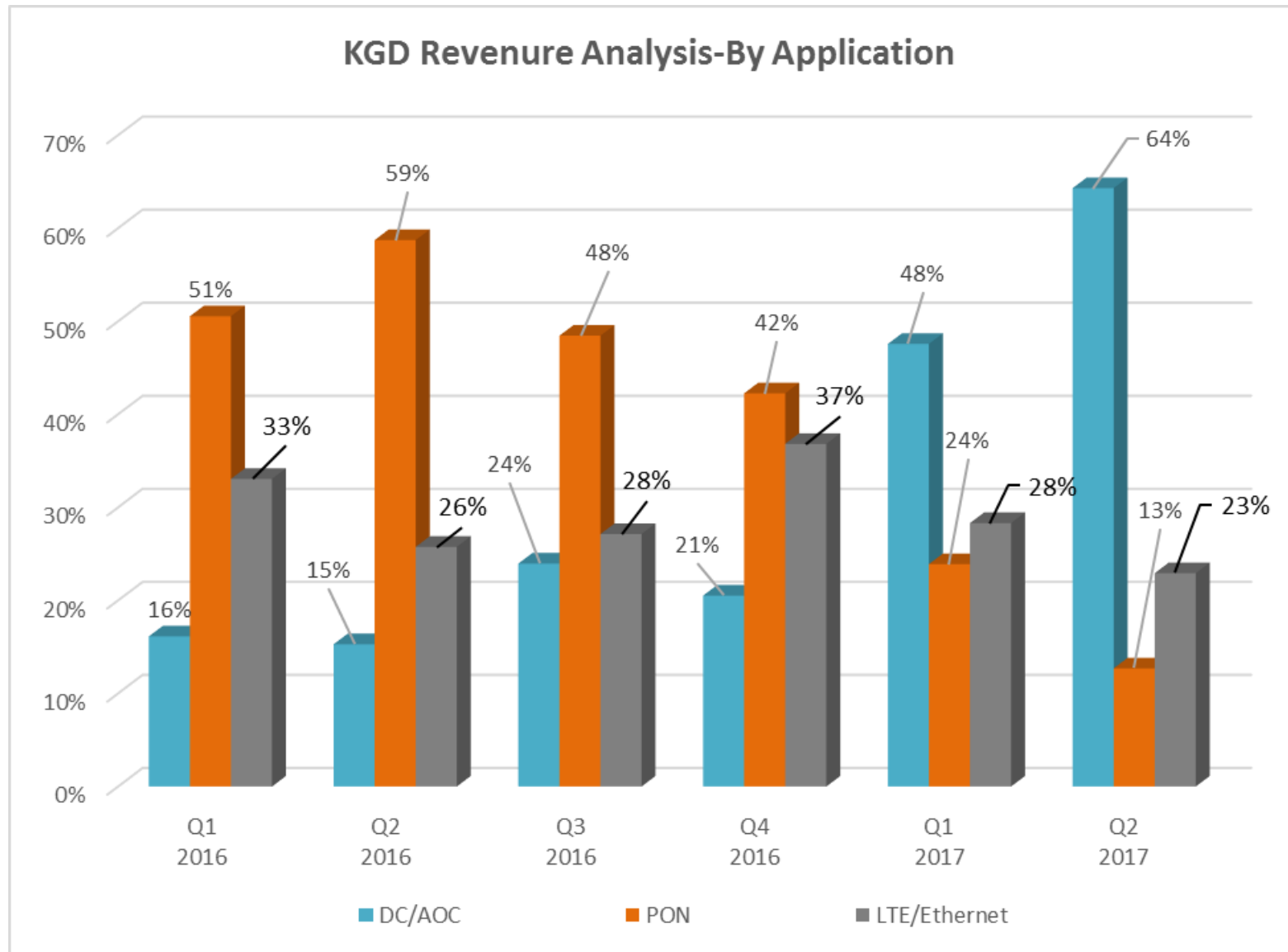
	2Q17	1Q17	2Q16
Beginning Balance	1,259,062	1,381,894	1,258,482
Cash from Operating Activities	80,188	29,540	43,166
Acquisition of property, plant and equipment	(32,301)	(67,921)	(45,266)
Decrease (Increase) in non-current assets	30,830	(31,090)	3,547
Decrease (Increase) in other current assets	(30,420)		
Acquisition of investments accounted for under the equity method	(14,906)	-	-
Proceeds from the sale of available-for-sale financial assets	1,635	-	34,362
Proceeds from Short-term Loan	-	20,000	-
Repayments of long-term loans	(4,708)	(4,800)	(4,811)
Treasury stock buyback	-	(12,955)	
Cash Dividend Paid	-	-	
The effect of exchange rate changes	(2,476)	(55,615)	1,225
Others	1,671	9	7
Ending Balance	1,288,575	1,259,062	1,290,712
Free Cash Flow (Note)	47,887	(38,381)	(2,100)

Note: Free Cash Flow = Cash from Operating Activities - Capital Expenditures

Revenue Mix % vs Gross Margin - QoQ



KGD Revenue Mix - QoQ



MARKET OVERVIEW

GCS Products



Wafer Foundry

RF

**Power
Electronics**

**Opto
electronics**

**Brand Name Chip
Products**

PD/MPD

APD

VCSEL

LD

GCS Brand Name Products: Applications & Markets



PD, MPD, APD, VCSEL, LD

**Data
Centers**



40G
100G
200G
400G

**Consumer
&
IoT**



AOC
HDMI
Mobile
Wearable

**Optical
Fiber
Networks**



LTE
(4/4.5/5G)
FTTx

RF Foundry Products: Applications & Markets



RF Wafer Foundry

**RFIC · HEMT · pHEMT · HBT,
InP HBT, GaN/Si · GaN/SiC**

**Wireless
(Mobile & Infrastructure)**



**Base Station
Mobile Phones
4/4.5/5G**



**Wifi
802.11AC
802.11AX**

Power Electronics Foundry Products: Applications & Markets



Power Electronics Wafer Foundry

GaN/Si · GaN/SiC, SiC



Optoelectronics Foundry Products: Applications & Markets



Optoelectronics Wafer Foundry

**APD, VCSEL, FP/DFB LD,
EML, 2D Image Sensors
Photonic Integrated
Circuits.....**

**Optical
Fiber
Networks**

Industrial

Medical

2H 2017 Optical Market Outlook



2017年全年全球通信设备市场仍将有3%的小幅下降，但在下半年资本开支有望触底反弹，4.5G网络扩容，5G及物联网的投资开始加大；

传统通信市场无线和有线宽带领域都将迎来新的机遇：

(1)5G标准制定进入关键阶段，国内企业如华为、中兴等主设备厂商开始掌握核心话语权，未来全球市场份额仍将提升，同时专利授权也将从企业支出改为收入；

(2)物联网百亿新连接，成为运营商下一个万亿市场。

2017年NB-IOT将正式商用，LTE-V将于2017年3月份全面冻结，下半年开始试商用，甚至5G都将首先应用于智慧城市及交通领域；

(3)光通信方面，中国移动持续发力固网宽地，2016年用户数量首次超过中国联通，2017年将向中国电信用户总量靠近，光器件、光纤光缆需求依然旺盛，随着网络流量暴增，光传输设备需求规模也在数十亿元以上。

光模块：

- * 流量爆发驱动模块升级，
- * 云计算大潮下数通成增长引擎。
- * 电信市场在接入、城域、骨干市场交替发力下，预计未来几年将保持稳步增长
 - 4.5G推动基站光模块从6G/10G向25G升级、
 - 10G GPON和EPON将成为接入网主流 (OLT → ONU)
 - 100G将向城域网下沉、
 - 400G或于2018年在骨干网规模商用。
- * 数通市场在云计算大潮的拉动下快速增长，100G需求迅猛，根据Infonetics，目前市场中65%的10G/40G/100G需求都已经来自数据中心。

根据3GPP的时间表，5G将在3GPP的主导下于2018年9月确定Release 15早期标准，2019年末~2020年初确定Release 16最终标准，但现在种种迹象表明，5G或将提前到来!

终端侧：强调芯片、天线的能力提升，多种终端接踵而来；
网络侧：C-RAN、D-RAN、宏基站组网方式更加多样，
内容侧：VR、4K/8K、物联网等成为杀手应用。

China: 5G网络投资总规模达6500亿元

NB-IoT: Narrow Band Low Power Wide Area Network radio technology standard

第一个面向物联网的运营商级别通信协议。

目前，**3GPP**已经正式批准通过了支持**Band 70**的**NB-IoT**。

中国三大运营商都表示**2017**年将大规模商用**NB-IoT**程度的活跃起来。

NB-IoT将在低耗能、低信息量、巨量化传感器网络中应用，
领域包括：

- ①以水电气的智能抄表业务为代表的智能家居业务;
- ②以邮筒、垃圾箱、路灯、下水道、停车位管理为代表的智慧城市业务;
- ③以快递、宠物、畜牧业、儿童老人跟踪为代表的智能追踪业务;
- ④以可穿戴健康设备为代表的智能医疗业务;
- ⑤其他工业领域小规模、长时间数据收集案例或周期性控制应用。

最近受到关注的摩拜单车/气车等应用也是**NB-IoT**表现的重要舞台。

V2X: Cellular Vehicle-to-Everything Standard

车联网专有协议**LTE-V2X**将于**2017年3月份**冻结。

LTE-V是中国具有自主知识产权的**V2X**技术，

由华为、大唐等公司主导提出，工信部力推智能网联，

大概率会采用**LTE-V.LTE-V**利好车联网和自动驾驶产业链。

(1) 车联网产业链：

终端侧：车载终端设备(**LTE-V**通讯模块、北斗/**GPS**导航模块)

最先收益，弹性大，规模达千亿；

网络侧：看好主设备商厂商；

服务侧：主要看好车联网平台和**UBI**保险。

(2) 自动驾驶产业链：

主要受益的有雷达、摄像头等传感器和高精度地图。另外，可关注路侧交通设施升级改造领域。

Q & A



環宇芯系天下

**For further inquiry
investors@gcsincorp.com**

