



SEOUL SEMICONDUCTOR

2021 3Q Financial Results

EARNINGS RELEASE

2021 / 3Q

Nov. 5th, 2021

All IR information can be downloaded from the internet

1) IR Presentations

- Visit Seoul Semiconductor's Website <http://www.seoulsemicon.com/en/ir/data/>

2) Financial Statements

- Full financial statements can be downloaded from the Dart system

<http://englishdart.fss.or.kr> Enter company code 046890 and then press search button

- XBRL Financial Statements (check menu on the top) > XBRL Search > Enter company code 046890

- You can also access other material disclosures of Seoul Semiconductor on this site

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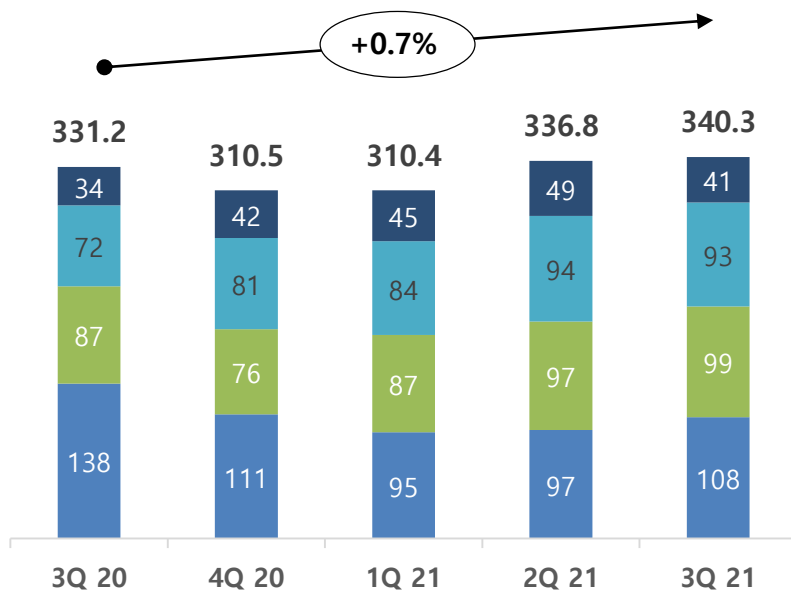
2021 3Q Financial Results

I. 2021 3Q Earnings _ 1) Sales and Profit

- Started to provide mini LED to Global TV manufactures
- LED chips using 'WICOP', patented packageless LED technology, increased: penetration ratio to global automobile is 10%, ratio to display products is 10%

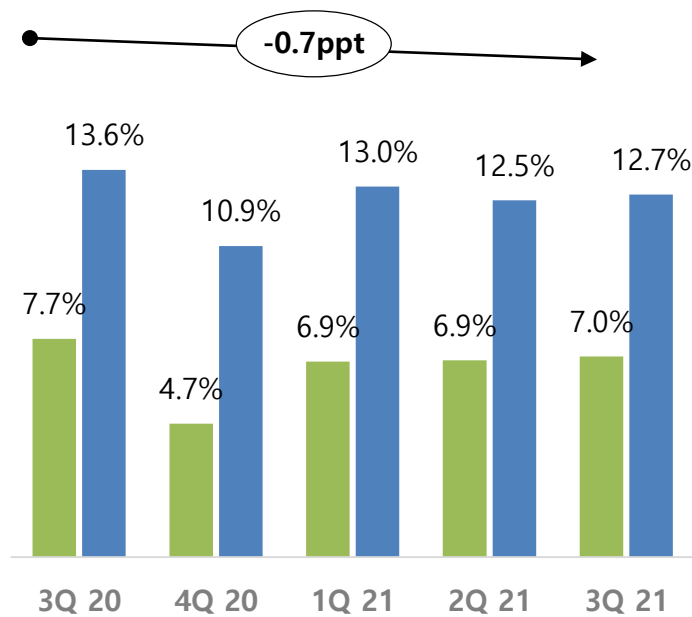
Sales (Bn KRW, %)

- Automobile
- General lighting
- Other Displays (NTB, TBL, etc.)
- TV & Monitor



Profit (Bn KRW, %)

- Operating profit margin
- EBITDA margin

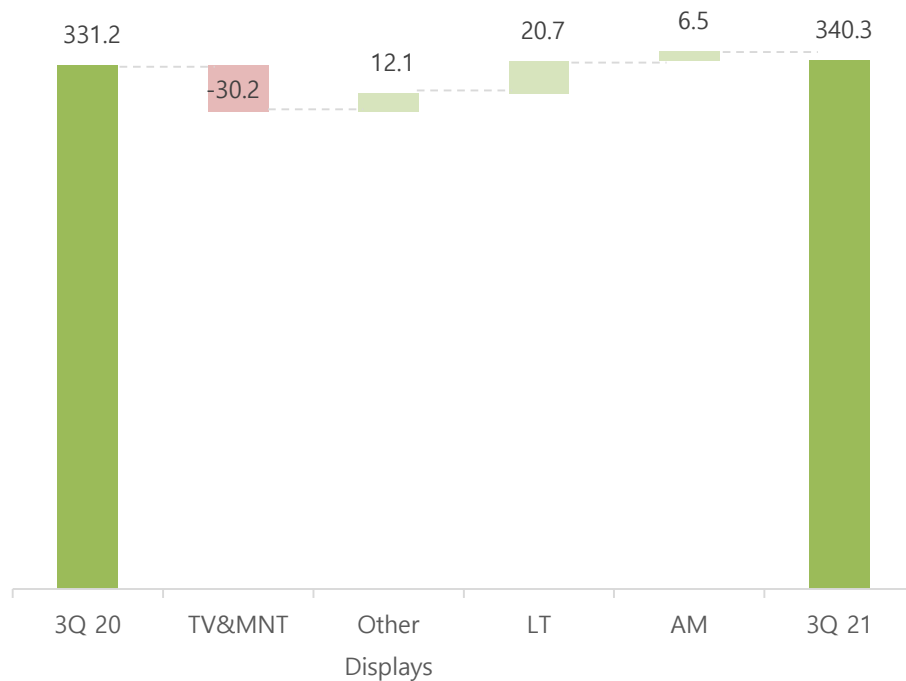


I. 2021 3Q Earnings _ 2) Sales and Profit Analysis

- Seek growth potential in general lighting market (\$7 bil. market) using SunLike, High Power and Horticultural lightings
- Total solution provider for autonomous cars: exterior/interior lighting; micro LED, for disinfection and safety; Violeds, Red and IR

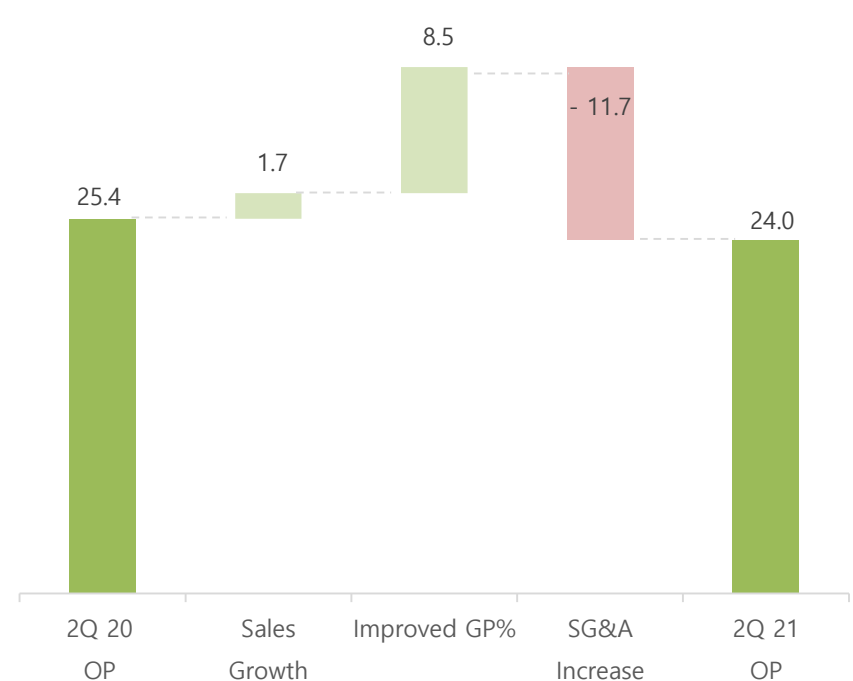
Sales

(Bn KRW)



Profit

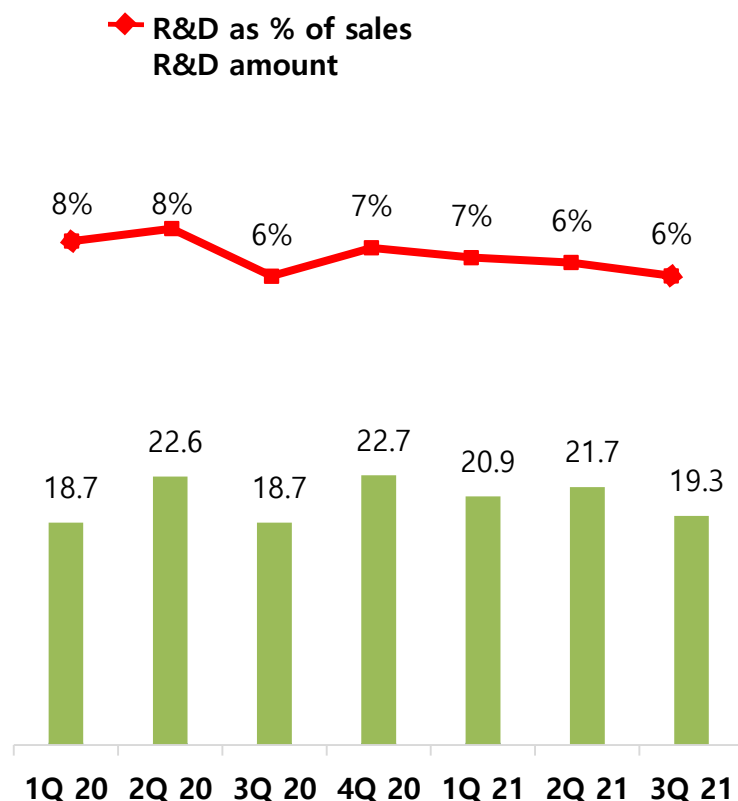
(Bn KRW)



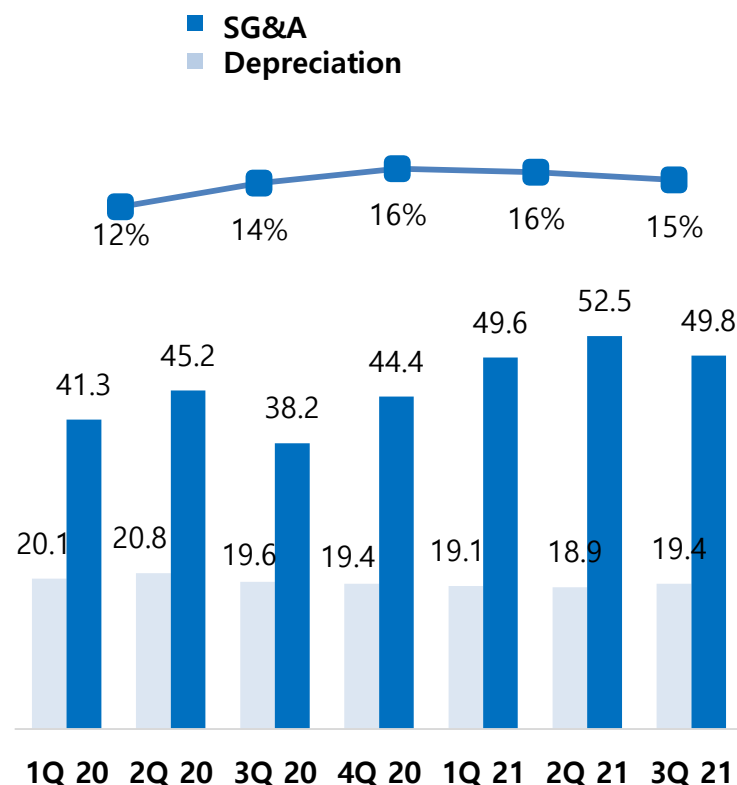
I. 2021 3Q Earnings _ 3) Investments & Expenses

- Former investments into 2nd generation patented LED technology reduced further R&D burdens
- Investments to sales and marketing to continue to raise brand identity and to get better price

R&D Investments (Bn KRW, %)



Expenses (Bn, KRW, %)

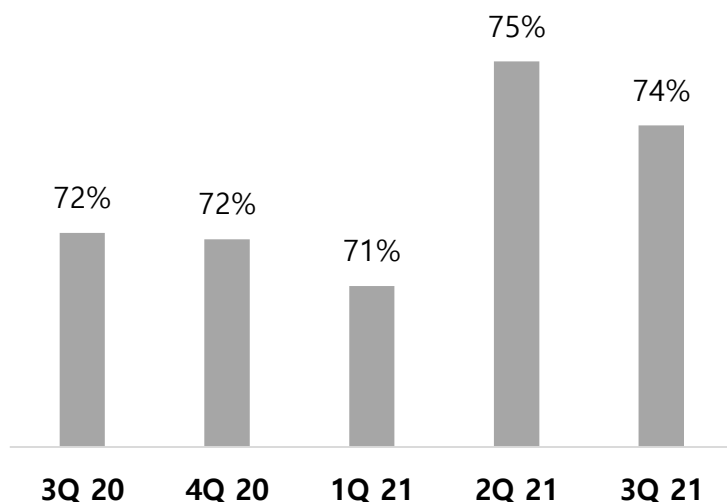


I. 2021 3Q Earnings _ 4) Production and CAPEX

- Completed to investments for mini LED and micro LED to meet 2022 demands

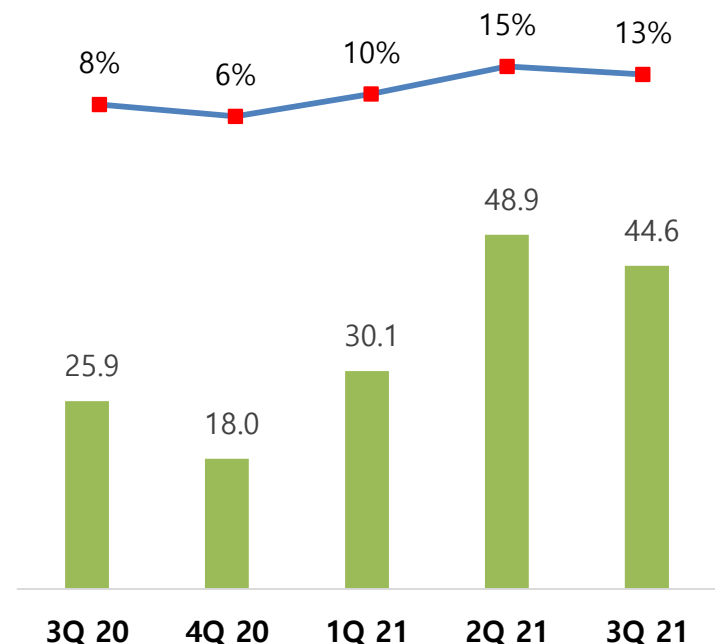
Production (%)

■ Utilization ratio



CAPEX (Bn KRW, %)

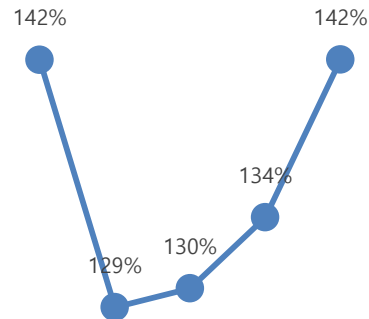
■ CAPEX as % of sales
■ CAPEX



I. 2021 3Q Earnings _ 5) Financial position

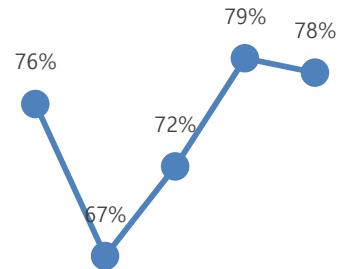
- Current ratio maintained over 100% and other key financials remained similar level QoQ.
- Strategically increased safety inventory level to cope with raw material shortages and distribution disruptions

Current ratio



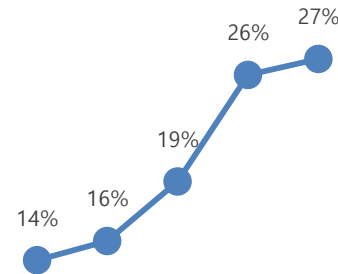
2Q20 3Q20 4Q20 1Q21 2Q21

Debt to equity



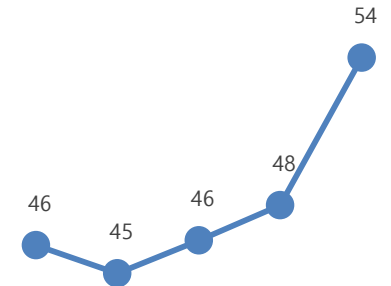
2Q20 3Q20 4Q20 1Q21 2Q21

Net debt



2Q20 3Q20 4Q20 1Q21 2Q21

Inventory days



2Q20 3Q20 4Q20 1Q21 2Q21



2021 4Q Guidance

II. 2020 4Q Guidance _ 1) Key growth momentum

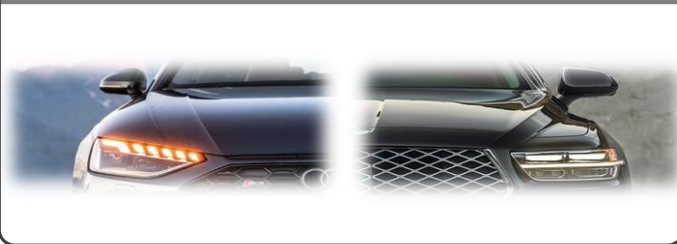
From a low cost light solution supplier to healthy, natural and clean light provider

Biz	Solution	Technology
Display	<ul style="list-style-type: none">• Better cost structure than OLED and high resolution solution: mini LED• Slim BLU• Reduce excess blue light causing vision loss	WICOP Mini WICOP LBL(Low Blue Light)
Auto	<ul style="list-style-type: none">• Clean ambiance (Air, Surface) reducing possibility of Covid-19 infection• Ideal LED chips to design slim headlamps• Autonomous driving, Safety , Information	Violeds WICOP VCSEL, Micro LED
Lighting	<ul style="list-style-type: none">• Fit 24h bio-rhythm, Protect myopia• High Power, Horticulture	SunLike WICOP, Red/IR

II. 2020 4Q Guidance _ 1) Key growth momentum

Examples of new LED applications

Auto (Exterior) – Stylish Headlamp



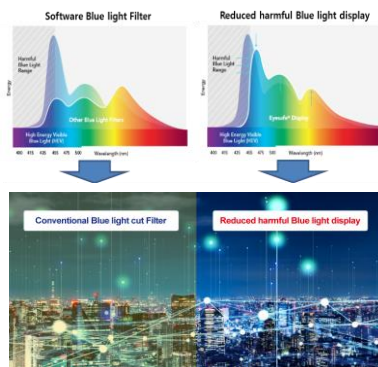
Auto (Interior) – Air and surface sanitization



Auto - Safety



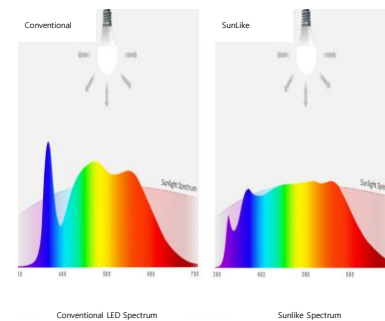
Display - Low Blue Light



Micro LED Display



SunLike – Natural Lighting



Horticultural lightings

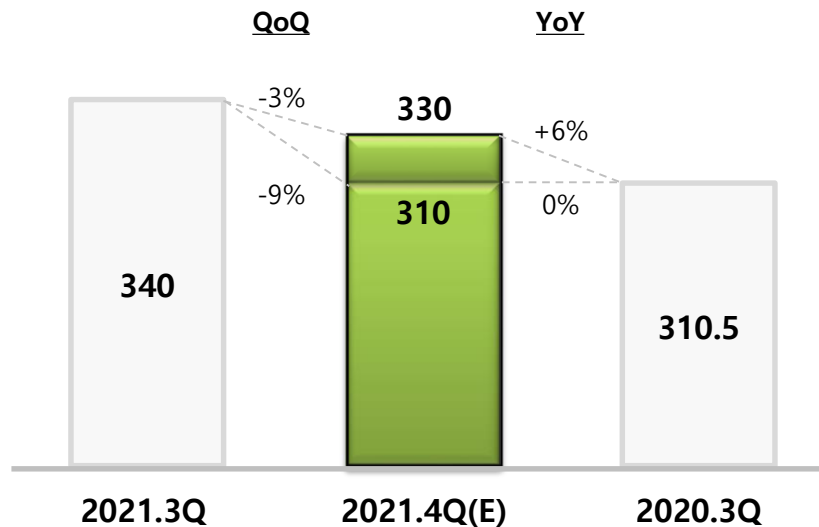


II. 2020 4Q Guidance _ 2) 4Q Guidance

- 4Q sales guidance set at 310B to 330B KRW. 2021 revenue to be over 1.3B growing about 13%.
- Expect further growth once ongoing global SCM issues are eased in 2022, along with our added capacity and successful design-win with key customers

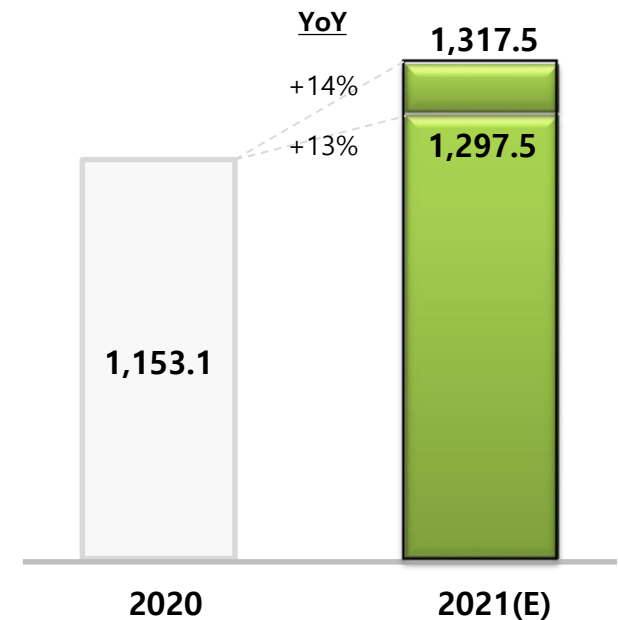
4Q Guidance

(bil. KRW)



Yearly Forecast

(bil KRW)





APPENDIX

- 1) WICOP related patent injunction against 13 brands
- 2) Condensed Financial Statements
- 3) Quarterly Profitability Ratios

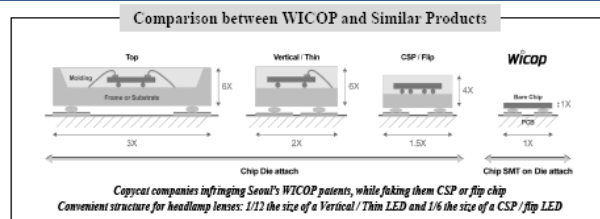
III. Appendix _ 1) WICOP related patent injunction against 13 brands

Global 102 Car Models Use WICOP “Permanent Injunction against 13 Brands”

15 enjoined components that are used in 100 models and 7 million sales of global automobile products
Second permanent injunction issued for infringement of WICOP patents: prior injunction was against a Philips brand TV product

ANSAN, South Korea – Seoul Semiconductor Co., Ltd. (“Seoul”), a leading global innovator of LED products and technology, announced that the New Jersey District Court issued a consent judgment and permanent injunction for infringement of twelve Seoul patents against 13 automotive lighting brand LED products being sold through automotive parts’ distribution channels. WICOP is a revolutionary technology that enables a package-less semiconductor. In 2015, WICOP was launched to the world when Seoul’s CEO, Chang Hoon Lee, invited global reporters to Shanghai to launch the new WICOP products.

Seoul Semiconductor’s WICOP Technology Projects			
On-going Project	Confirmed Project	Customers	Car Models
182	63	32	102



WICOP technology has been used in 102 car models and approximately 10% of global automotive lighting products, such as headlamps and running lights. Seoul is leading the development of various 2nd LED technology. As the right-table shows, this injunction judgment follows Seoul’s victories in all 32 patent lawsuits filed in 7 countries or the past 3 years – including permanent injunctions and a recall order of infringing products.

“Intellectual property provides hope for young entrepreneurs and small businesses. But, it is very disappointing that even global, established companies knowingly uses products that infringe others’ patents,” says Seoul’s founder, Chang Hoon Lee. “Intellectual property is an incredible tool that allows people to break through class barriers, enabling small businesses and young entrepreneurs to compete with anyone.

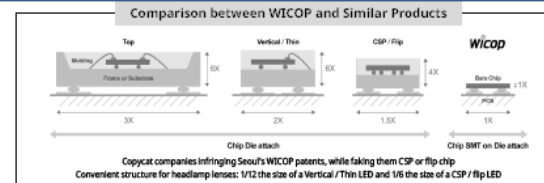
Since our industrial revolution, the infant mortality rate has declined from 43% to 3%, while access to electricity has increased to reach 83% of total world population and the illiteracy rate has also reduced significantly. So Intellectual property enable to make life more transparent and safer,” added Lee.

The World’s 1 st and 2 nd Generation LED Technologies of Seoul Semiconductor		Judgment
Violeeds	Disinfect virus and bacteria	Permanent Injunction
SunLike	Light source for healthy circadian rhythm to match 24-hour body cycles	—
Wicop	Light, thin, short and small / Core technology of Mini and Micro LED	Permanent Injunction
Filament	Filament LED with similar design to conventional incandescent bulbs	Permanent Injunction / Recall / Destruction
AcricHMUT	Easily connectable to 220V for home use with less number of LED	Permanent Injunction / Recall / Destruction
Acrich Driver	Connectable to 220V for home use and 20% cost reduction	Permanent Injunction
UCD Phosphor	White LED light source with color rendering close to sunlight	Permanent Injunction
Over 10K hour	Use 5 years available for 5 hours a day (Up to 10 times longer lifespan than incandescent bulbs)	Permanent Injunction
Over 150lm/W	Electricity cost less than one-tenth compared to conventional incandescent bulbs and one-third of fluorescent lamps	Permanent Injunction / Recall / Destruction

20% of Global TV Display Uses WICOP “Permanent Injunction against 13 Brands”

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Seoul Semiconductor’s WICOP Technology Shipment		
Products	Shipment (M unit)	Application (%)
TV	220	20
Tablet	150	27



bal annual production of 80 million automobiles. It also widely used in display products such as smartphones and tablets and approximately 20% of 220 million units of global display products based on TV in 2020. WICOP is recognized as a revolutionary semiconductor technology and is essential for production of mini and micro LEDs for an advanced display, and the global mini LED market expects to grow at CAGR of 52% and market revenue of \$1.2 billion in 2022 according to Strategies Unlimited, a global market research leader. Seoul is leading the LED industry with its differentiated 2nd generation technologies based on more than 10,000 patented technology.

As the above table shows, this injunction judgement follows Seoul’s victories in all 32 patent lawsuits filed in 7 countries from 2018 – including permanent injunctions and a recall order of infringing products. “Intellectual property provides hope for young entrepreneurs and small businesses. But, it is very disappointing that even global, established companies knowingly uses products that infringe others’ patents,” says Seoul’s founder, Chang Hoon Lee. “Intellectual property is an incredible tool that allows people to break through class barriers, enabling small businesses and young entrepreneurs to compete with anyone. Since our industrial revolution, the infant mortality rate has declined from 43% to 3%, while access to electricity has increased to reach 85% of total world population and the illiteracy rate has also reduced significantly. So Intellectual property enable to make life more transparent and safer,” added Lee.

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Financial Times

Wall Street Journal

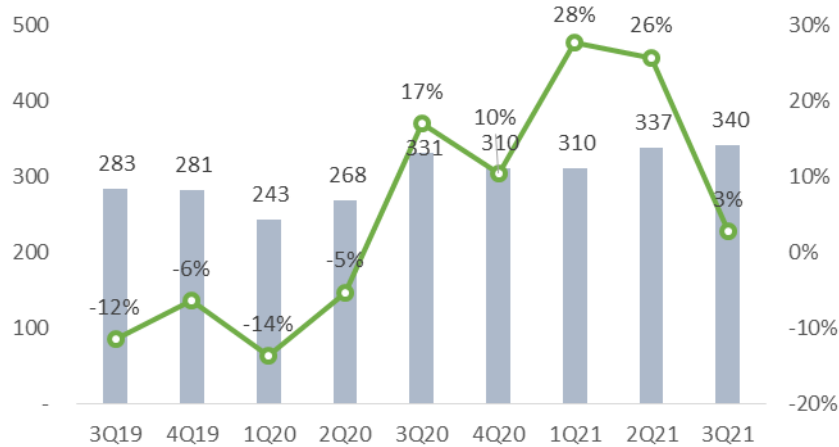
III. Appendix _ 2) Condensed Financial Statements

(Bn KrW)	2021.Q3	2021.Q2	2021.Q1	2020.Q4	2020.Q3	2020.Q2	2020.Q1	2019.Q4	2019.Q3	2020	2019	2018	2017
[Income Statement]													
Sales	340.3	336.8	310.4	310.5	331.2	268.1	243.2	281.3	283.4	1,153.1	1,129.9	1,194.2	1,110.4
COGS	266.4	261.0	239.5	251.6	267.7	209.2	195.9	222.0	222.9	924.4	876.2	871.0	826.1
COGS (%)	78.3%	77.5%	77.2%	81.0%	80.8%	78.0%	80.6%	78.9%	78.7%	80.2%	77.5%	72.9%	74.4%
Gross Profit	73.8	75.8	70.9	58.9	63.6	58.9	47.3	59.3	60.5	228.6	253.7	323.2	284.3
Gross Profit (%)	21.7%	22.5%	22.8%	19.0%	19.2%	22.0%	19.4%	21.1%	21.3%	19.8%	22.5%	27.1%	25.6%
SG&A	49.8	52.5	49.6	44.4	38.2	45.2	41.3	45.4	48.5	169.0	204.1	228.3	186.1
SG&A Ratio	14.6%	15.6%	16.0%	14.3%	11.5%	16.8%	17.0%	16.1%	17.1%	14.7%	18.1%	19.1%	16.8%
Operating Profit	24.0	23.3	21.3	14.6	25.4	13.7	6.0	13.9	12.0	59.7	49.5	94.9	98.3
Operating Profit (%)	7.0%	6.9%	6.9%	4.7%	7.7%	5.1%	2.5%	4.9%	4.2%	5.2%	4.4%	7.9%	8.8%
Pre-tax Profit	34.1	21.3	31.0	12.6	18.5	13.0	10.1	0.2	19.6	35.7	47.7	78.4	70.5
Net Profit	28.4	18.4	25.3	14.2	14.6	8.8	6.1	1.5	15.6	29.0	35.8	62.6	46.4
[Balance Sheet]													
Total Assets	1,542.9	1,477.5	1,404.0	1,320.4	1,428.5	1,365.6	1,325.0	1,322.1	1,311.4	1,325.0	1,322.1	1,293.8	1,227.3
Current Assets	759.9	736.6	703.4	638.7	719.2	653.2	610.1	619.1	592.2	610.1	619.1	601.6	575.5
Cash and Equivalents	46.3	48.7	49.7	80.2	96.3	70.1	64.6	72.4	43.1	64.6	72.4	36.8	77.7
Inventory	218.8	187.7	170.7	150.0	161.8	179.0	164.7	154.3	150.3	164.7	154.3	155.2	137.5
Non-current Assets	783.0	743.2	700.7	681.7	709.2	712.3	714.9	703.0	719.2	714.9	703.0	692.2	651.9
Total Liabilities	674.7	649.8	588.8	529.7	616.3	585.4	561.8	576.4	562.8	561.8	576.4	568.5	551.4
Current Liabilities	537.0	550.7	540.0	493.9	508.3	474.6	458.9	472.8	445.2	458.9	472.8	412.7	435.5
Non-Current Liabilities	137.8	99.1	48.8	35.9	108.1	110.7	102.9	103.6	117.6	102.9	103.6	155.8	116.0
Total Equity	868.2	827.3	815.2	790.6	812.1	780.2	763.2	745.7	748.6	763.2	745.7	725.3	675.9

III. Appendix _ 3) Quarterly Profitability Ratios

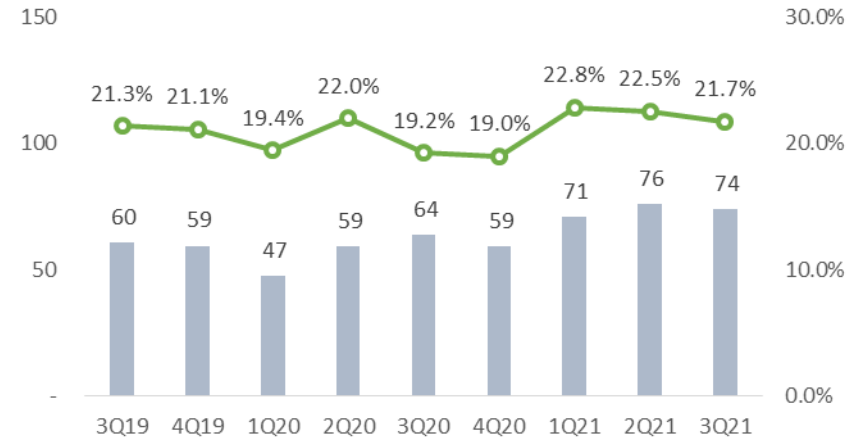
Sales growth

(Bn KRW, YoY growth %)



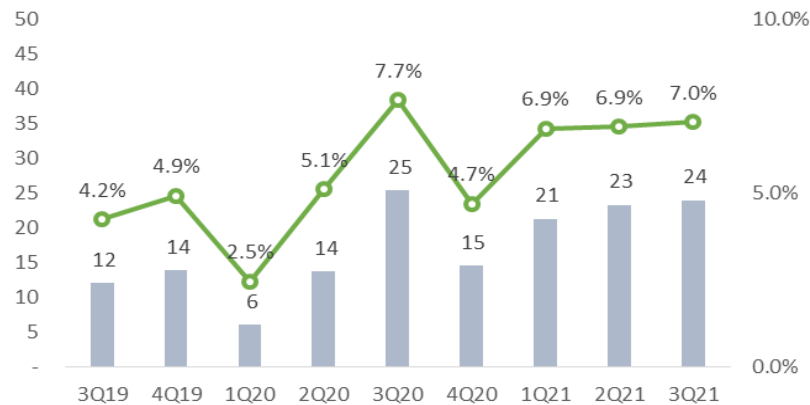
Gross profit

(Bn KRW, %)



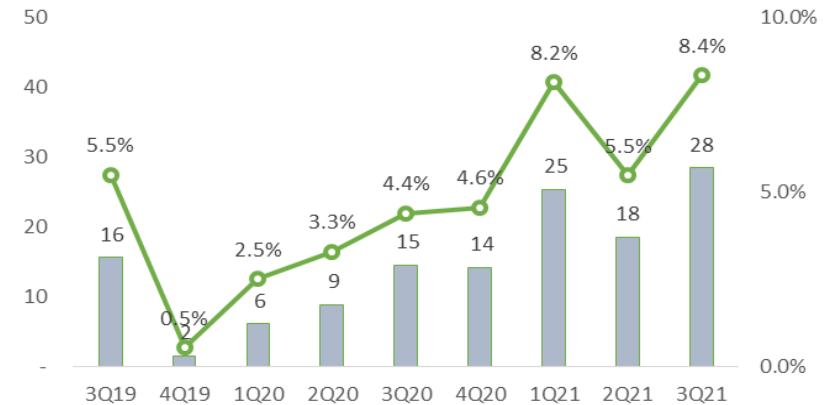
Operating profit

(Bn KRW, %)



Net profit

(Bn KRW, %)



**“After numerous trial and error,
we have secured the next 10 year
growth with our leading technologies”**



SEOUL SEMICONDUCTOR