

2022년 2분기 실적 발표

EARNINGS RELEASE

2022년 2분기

2022년 8월 9일

서울바이오시스㈜의 IR자료 및 재무제표는 인터넷을 통해 다운로드 받으실 수 있습니다.

- 1) IR Book: 서울바이오시스㈜ 홈페이지 (http://www.seoulviosys.com/kr/ir/data/)
- 2) 재무제표: 금융감독원 전자공시사이트 (http://dart.fss.or.kr)에서 회사명(서울바이오시스) 또는 회사코드 (092190)를 입력후 검색버튼 클릭, 재무제표는 분/반기 및 사업보고서를 통해 확인하실 수 있습니다.

유의 사항

본 자료에 포함된 실적은 K-IFRS 연결 기준입니다.

또한 본 자료는 미래에 대한 "예측정보"를 포함하고 있습니다. 이는 과거가 아닌 미래의 사건과 관계된 것으로 회사의 향후 예상되는 경영현황 및 재무실적을 의미하고 표현상으로 '예상', '전망', '계획', '기대' 등과 같은 단어를 포함합니다.

"예측정보"는 그 성격상 불확실한 사건들을 언급하는데, 회사의 향후 경영현황 및 재무실적에 긍정적 또는 부정적으로 영향을 미칠 수 있는 불확실성에는 다음과 같은 것들이 포함됩니다.

- 환율, 이자율 등의 변동을 포함한 국내외 금융시장의 동향
- 사업의 처분, 매수 등을 포함한 회사의 전략적인 의사결정
- 회사가 영위하는 주요 사업 분야의 예상치 못한 급격한 여건 변화
- 기타 경영현황 및 재무실적에 영향을 미칠 수 있는 국내외적 변화

이러한 불확실성으로 인해 회사의 실제 미래실적은 "예측정보"에 명시적 또는 묵시적으로 포함된 내용과 중대한 차이가 있을 수 있음을 양지하시기 바랍니다.

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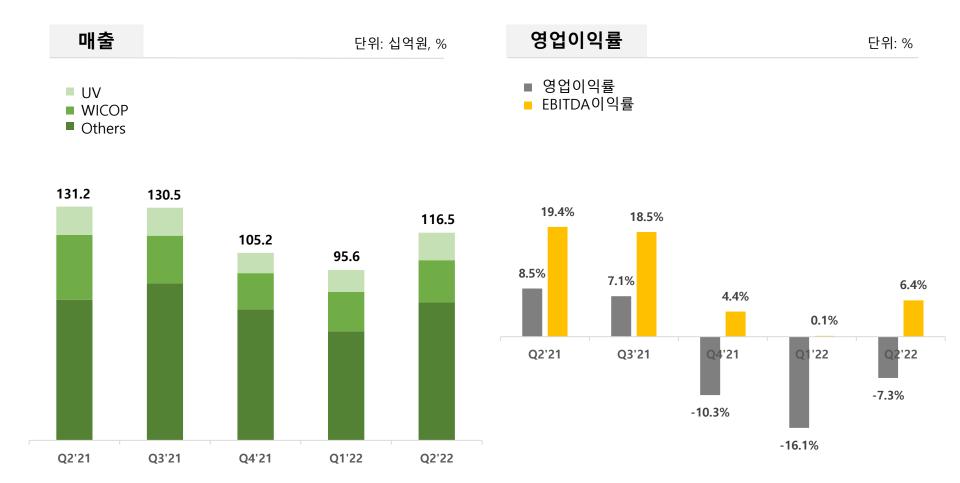


I

2022년 2분기 실적

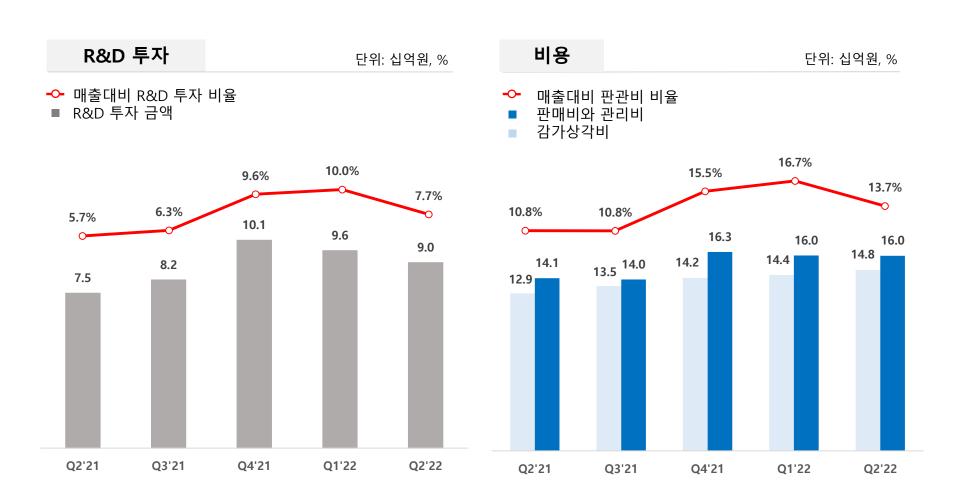
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- 2022년 1분기에 이어 가전 향 공급 확대로 UV 매출 반등세 지속



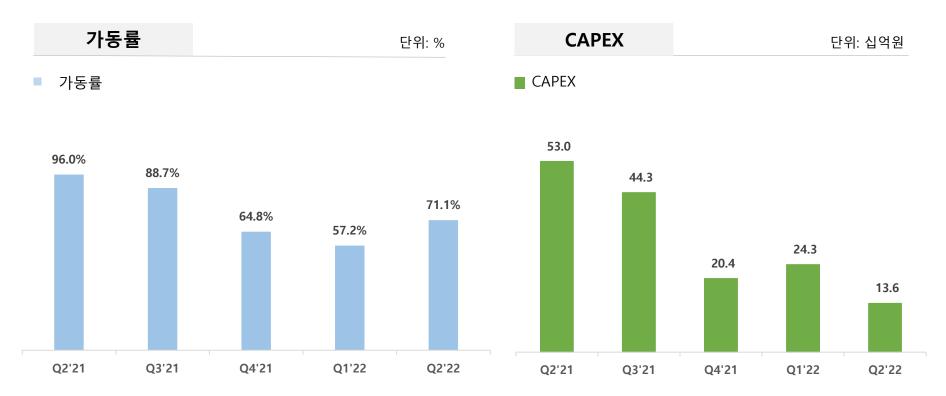
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› 22년 2분기 R&D 투자 비율 및 판관비 비율 모두 1분기 대비 감소



I. 2022년 2Q 실적 _ 3) 가동률과 CAPEX

- UV, 자동차, 조명 향 매출 증가로 가동률 증가
- 21년 2세대 설비 조기 집행 이후 Capex 감소세



주1) 상기 생산실적 지표는 "해당 분기 월평균" 수치로, 분기말 수치와는 다소 차이가 있습니다.

주) IR 잠정발표 이후 재무제표 확정시 변경사항이 수정 반영됩니다.

2022년 3분기 매출 전망

II. 2022년 3분기 실적 전망_1) 응용분야별 지속성장 방안

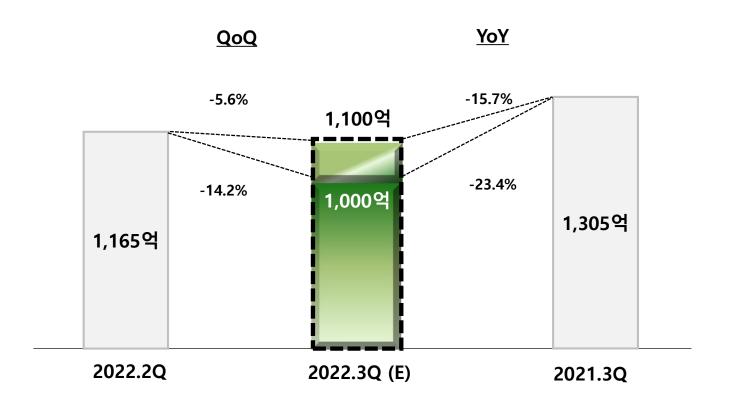
2세대 기술 혁신으로 광반도체 Tipping Point 도래 예상

응용분야	솔루션	구현기술
• UV	 글로벌 UV-C 1위 사업자 / MS 확대로 초격차 추진 자동차향 제품 진출 및 HVAC 등 신규 application 증가 글로벌 가전사 향 매출 확대 지속 유해물질 수은 대체하는 UV-C 수처리 시장 진출 	Violeds
Micro LED	 LCD, OLED 대체할 최고의 명암비 및 자유로운 사이즈가 구현 가능한 차세대 핵심 특허 기술 스마트 워치용 디스플레이 개발 / 양산 준비 AR 및 VR 시대에 대응하기 위한 직경 1μm 블루·그린 마이크로 (LED) 소자 개발 고휘도를 요구하는 자동차 외관 디스플레이와 ADB, RCL은 LED가 유일한 솔루션이 될 전망 	WICOP MC
• Chip	 PKG나 별도 실장없는 반도체 칩 기술 혁명 고 효율, 고 수명, 고 색재현성, 고 전압구동 가능한 최고의 솔루션 200nm대 UV부터 1400nm대 LD까지 전파장 EPI, CHIP 자체 생산하는 세계 유일한 회사 	WICOP

II. 2022년 3분기 실적 전망_2) 가이던스

글로벌 IT 수요 불안 감안하여 매출 1,000 억원에서 1,100 억원 제시

3분기 매출 가이던스





III. Appendix_1) 미래 2세대 LED 기술 사례

WSJ에 게재된 기사 - 미래 2세대 LED 기술 선점

16 June 2022

서울반도체는 대한민국 1위의 LED기업이면서 특허 출원 세계 1위 기업이다. 2세대 혁신 기술로 세계 1위 향해 도약 준비를 마쳤다. 최근 시판되는 LED는 1만 시간 이상의 수명, 150 루멘퍼와트(lm/W)의 효율, 수준 높은 색 품질(CRI 90+)은 모두 서울반도체의 특허가 필요하다. 조명, 디스플레이, 자동차에 사용되는 가시광 LED는 2년 연속 3위로 1위에 도전하고 있다.

THE WALL STREET JOURNAL. DOWN JOHN J. AMERICA JOHN D. 150 WAS A COMMAND THOUGH A 150 WAS A COMMAND TH

Pre-empting The Future with 2nd Generation LED Technologies

A LED patent monster: 18,000 patents, winning all 98 IP infringement cases since 2003

30 years all-in for Opto Semiconductors, Ranked 1st and 3rd in UV LED and visible LED sector
Son of a farmer shapes the future of light; inspiring young people to have a dream

ductor (LED) company #1 patent-powered cor Seoul is the only comp entire wavelength rang- olat and infrared, in ligh laser diodes (VCSEL), vertically integrated with of these technologies; packages and modules Seoul is investing near	any in the world to offer the from visible light to ultravi- t-emitting diodee as well as in addition, Seoul is 160% h production capacity for all from waters and chips to by \$100 million in R&D every	Since the birth of the centr 4.5 billion years ago, the string of life has evolved under the influence of Sun's light. As a result, our human body operater on a 24-hour basis following the cycle of the sun. In the morning surlight, the body releases the cerebinal surface of the control of the control to raise eventroes. It releases the melationis hormone under the influence of early eventries surlight to help us toog, they seen below the centre surlight to help us toog, they seen they be immune cells.					
at a staggering rate, unrivaled in the LED in	its collection of patents is industry. Besides technology	 Beauti has conducted experiments with various institutions across the globe to prove the amazing benefits of it's Surfule tederology. These studies confirmed that Surfules tederology. These studies confirmed that Surfules 10 the research was conducted by the Center for Clinical Investigation (CO) at Brighten and Wetners's Hospital Investigation (CO) at Brighten and Wetners's Hospital Investigation (CO) at Brighten Provincial Confirmed Confirmed Confirmed Confirmed (CO) and Confirmed Confirmed (CO) and Confirmed Confirmed (CO) and Confirmed Confirmed (CO) and CO). 					
or the LED products	n the word today can be						
produced unless seol	a approved use use or its						
Ready to leap to #1 in	the world with						
	condigeneration that enables.	Automotive: Light technology essential for current and huture automemous driving vehicles For the safety of drivers and pedestrians, Vehicle to Everything (V2Q) lighting technology recognizes and communicates with surrounding objects and in essential for saff-driving cars. In order to resizte V2X lighting technology, a bright utbe-small LED drip in essential. In order to entil light of sufficient histopressis while being small					
im/W, better color qual like a frament light but CH Lee started the cor worked lirelessly stony today! to develop a colk these new technologies With his ongoing fight i he also aims to give ho fair opportunities.	by (CR890+), classic designs s, etc. Since Secul's founder spany 30 years ago, he has saide his teams (and still is						
Industry	2 nd Generation I	LED	Seoul Technologies				
Common Requirements	Lifetime: 10,000 HR1, Brights Color Rendering Index	wsx: 150km/W1 CRQ; 90f	EPI to PKO, 10,000 IPs CdO Phosphor				
Lighting	Natural light for human circs	idian flythms	Sunilite				
Lighting	Classic design		Filament				
12/3/2/2020	Autonomous driving, intellige	ert headlamps	Wicop				
Automotive	Display		wicap				

II 98 IP infringement cases sin	nce 2003
and 3rd in UV LED and visit	ele LED sector
iring young people to have a	dream
	him. From that moment on, he decided to live by the same principle. He applied it when he studied physics i university and while he studied for his MBA degree. Okarioma City University and received As in all subsections.
rs: Ultra-high-definition micro and mini LED v to Tablet s of the future (including those for Augmented	and won the Presidential Award at graduation. Later, he established Seoul Semiconductor in a small rente office, and eventually grew Seoul into a billion-doll
t, deliver exceptional image quality and have a respon. They require a light source in the form	For the past 30 years, he has directly led research and development, and has arrassed a vest collection : 18,000 patients. He is listed as an inventor on 1,300 i those, in the fight for fairness, Seoul has won all of the 9 patient infringement cases that were started.
appliances: A Virus-Pree Life Using plet Light. COVID-19, the United States had \$2,000 flu covid-19 the emergence of COVID-19 will end by 10x. It is expected that COVID-19 will be to produce variants and remain a variable we	To CH Lee, patients mean a lat. He believes that developed countries where patients are insepecte industries developed more and popule to be better levs. The 15th contravy industrial involution towered the power said from 55th of 5th visious, and the infalm metallary to the 3th to 3th. The spread of the insulability of excite by and the laternal, decreased the fill listeacy rate and information become unleverably accessible, and event ably improved harman rights.
has developed Violeds technology that can without the use of any harmful chemicals or ics. Whether it is in residential appliances or large systems within commercial buildings, Violeds	it arges CEO Lee that there are still two-faced pole infringing provided who emphasise perivormental, soci- and corporate governance while saling obvious infringed products by changing labels or who are will: to buy infringing products for a cheep price. By defect and taken the provided provided in the provided property by the provided provided provided provided provided that failmess done exist.
Iniversity to be able to bring this technology to Some of Secul's most recent studies have shown iteds technology kills 99% of Delta and Omicron in just one second. During the same experiment,	fairness through patent lawsuits, and has not cut hi
in just one second. Juring the same experiment, tion in the amount of viruses in the air was ed of more than 80% within 20-30 minutes, which d to significantly lower infection rates. For more tion about this and other studies, please visit the floops of websitedittp://www.seoukinous.com/en/	

"The Wall Street Journal news organization was not involved in the creation of this content."

산업 구분	2세대 LED 요구사항	서울반도체 기술
공통	연색지수(CRI):90 이상, 밝기:150lm/W 이상	CdO 형광체, 18000특허
66	고전압 구동	<i>Acrich</i> Driver
조명	인간의 생체 리듬에 최적화된 자연광	SunLike
자동차	자율주행, 지능형 헤드램프	Wicop
디스플레이	명암 비, 해상도, AR/VR	Wicop mini/mc
가전 제품	NO 바이러스, 깨끗한 공기/물/표면	violeds

Semiconductor Today 게재된 기사 – WICOP 특허 소송 사례 소개

29 April 2022

필립스 TV 및 필라멘트 LED의 WICOP 기술 도용에 대한 소송





1st GENERATION LED 2nd GENERATION LED No Package COPY PRODUCT WITHOUT WIRES, THEY ARE ALL WICCP PRODUCTS.

Seoul Semiconductor files patent lawsuits over Philips' TV and filament LED bulbs

South Korean LED maker Seoul Semiconductor Co Ltd says that it has launched patent infringement lawsuits in the USA against global retail company Ace Hardware and in Europe against a distributor of Conrad Electronic's sales platform.

In the two cases, which are pending in the US District Court for the Eastern District of Virginia and the German District Court of Düsseldorf, Seoul asserted infringement of its patents by Philips brand TVs, filament LED bulbs, and premium lighting products. Seoul also sought a recall of infringing products as well as the destruction of those products in the German case.

In these lawsuits, Seoul's patents cover phosphor technology for high-quality color gamut and WICOP (Waferlevel Integrated Chip on PCB) technology.

Seoul says that it has developed its phosphor technology together with a Japanese company (M) over the last 15 years and has succeeded in producing LED lights that are the closest spectrum to natural light. Based on the quality of these lights, Seoul's phosphor technology can be found in premium lighting products requiring a color rendering index (CRI) of more than 90, as well as display products.

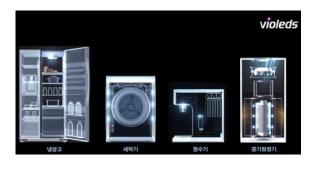
WICOP is a patented technology that is compactly designed without wire bonding or packaging, enabling LEDs to be mounted directly in a PCB assembly. The technology has been adopted in over models of 100 car (comprising about 10% of the global automobile market). The firm adds that it is also used in about 20% of the global TV market, as of 2020.

Seoul has already obtained permanent injunctions against various infringing products several times in Europe and the USA. In September 2020, the German District Court of Düsseldorf issued permanent injunctions, an order of recall and destruction against filament LED bulbs manufactured by a Phillips brand affiliate. In 2019 and 2021, the US District Court for the Central District of California and the New Jersey District Court issued permanent injunctions against the sales of a Philips TV product and 13 automotive lighting brand LED products, respectively.

Bloomberg에 게재된 기사 – UV 특허 소송 사례 소개

19 April 2022

'바이오레즈(Violeds)'를 침해한 세미콘라이트의 제품을 사용한 기업을 상대로 한 소송에서 판매금지 명령



Seoul Viosys Obtains Permanent Injunction Against UV LED Products That Infringe Violeds Patented Technology

April 19, 2022 08:00 PM Eastern Daylight Time

ANSAN, South Korea—(BUSINESS WIRE)—Seoul Viosys ("SVC") (KOSDAQ: 092190), a subsidiary of Seoul Semiconductor Co., Ltd., announced that the United States District Court for the Middle District of Florida issued a permanent injunction against Namsung America, Inc. ("Namsung"). Namsung sold home electronics incorporating UV LEDs manufactured and supplied by SL Vionics Co., Ltd. (previously known as Semicon Light).

"There are companies that seek to increase their profits by using other companies' patented technology. This is not only immoral, but it seeks to cheat inventors everywhere who have invested and believed in their ideas."

Tweet this

Prior to the lawsuit, Namsung ignored repeated notices of patent infringement from SVC. Since 2020, SVC has been requesting that companies stop selling SL Vionics' LED products. SVC believes that SL Vionics' LED products infringe SVC's proprietary Violeds technology, which SVC invented and has been utilizing to produce its UV LED products. When Namsung continued selling products after notice from SVC, SVC filed this lawsuit, which asserted infringement of eleven (11) patents.

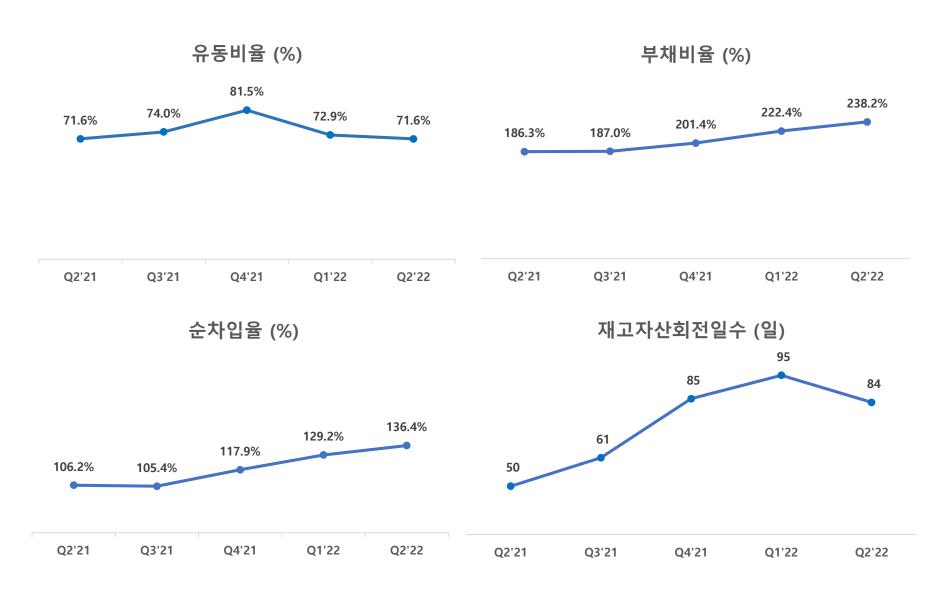
The Court's permanent injunction order applies to any colorable variations of the infringing products, as well as any parties who are in active concert or participation with making or selling such products.

SVC's CEO, Young-joo Lee, said, "There are companies that seek to increase their profits by using other companies' patented technology. This is not only immoral, but it seeks to cheat inventors everywhere who have invested and believed in their ideas."

In order to protect its hard-earned technology and promote a fair marketplace, SVC actively pursues enforcement against suspected infringing UV LED products all over the world. As an example, SVC recently brought a search and seizure of suspected infringing products against FNAC Darty Group, a large European retailer, and subsequently filed a patent infringement lawsuit in France. SVC also filed a patent infringement lawsuit against a European distribution company in the Netherlands, seeking a preliminary injunction against its UV LED products.

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III. Appendix_3) 재무현황



주) IR 잠정발표 이후 재무제표 확정시 변경사항이 수정 반영됩니다.

III. Appendix_4) 요약재무지표

	2022.Q2	2022.Q1	2021.Q4	2021.Q3	2021.Q2	2021.Q1	2020년	2020.Q4	2020.Q3	2020.Q2	2020.Q1	2019.Q4	2019.Q3	2019.Q2
(단위: 백만원)														
[손익계산서]														
매출액	116,522	95,642	105,196	130,551	131,161	121,769	431,282	120,485	120,661	103,235	86,901	91,548	90,668	89,618
매출원가	109,044	95,034	99,758	107,192	105,861	94,669	346,704	95,962	98,953	80,728	71,061	70,255	72,949	67,080
매출원가율	93.6%	99.4%	94.8%	82.1%	80.7%	77.7%	80.4%	79.6%	82.0%	78.2%	81.8%	76.7%	80.5%	74.9%
매출총이익	7,478	608	5,438	23,359	25,300	27,100	84,578	24,523	21,708	22,507	15,840	21,294	17,719	22,538
매출총이익율	6.4%	0.6%	5.2%	17.9%	19.3%	22.3%	19.6%	20.4%	18.0%	21.8%	18.2%	23.3%	19.5%	25.1%
판관비	15,983	16,005	16,290	14,041	14,145	14,451	57,193	15,407	12,180	16,451	13,155	14,254	15,041	14,832
영업이익	- 8,505	- 15,397	- 10,852	9,318	11,155	12,649	27,385	9,116	9,528	6,056	2,685	7,040	2,677	7,707
영업이익율	-7.3%	-16.1%	-10.3%	7.1%	8.5%	10.4%	6.3%	7.6%	7.9%	5.9%	3.1%	7.7%	3.0%	8.6%
세전이익	- 16,304	- 17,416	- 13,201	9,576	9,446	13,719	16,906	3,611	6,297	6,064	935	894	4,197	5,891
당기순이익	- 12,707	- 13,295	- 11,158	9,273	9,095	13,678	19,648	6,621	6,423	6,451	152	1,080	3,140	5,992
[대차대조표]							-							
자산총계	816,185	787,479	775,635	783,137	725,153	660,388	582,883	582,883	608,306	602,296	602,907	579,081	555,433	558,368
유동자산	223,354	213,260	219,237	229,785	221,965	195,876	137,938	137,938	159,526	156,271	156,670	137,985	109,376	117,087
현금 및 현금성 자산	16,170	5,391	9,778	9,976	10,216	11,763	6,947	6,947	7,522	3,082	5,298	6,272	9,348	4,378
재고자산	113,260	100,895	100,245	96,539	78,999	70,603	64,094	64,094	74,737	74,495	67,714	54,943	55,620	47,991
비유동자산	592,831	574,219	556,398	553,352	503,188	464,512	444,944	444,944	448,780	446,025	446,237	441,096	446,057	441,281
부채총계	574,841	543,236	518,264	510,281	471,872	412,070	363,545	363,545	393,602	392,026	399,443	391,587	393,176	400,590
유동부채	312,061	292,433	268,994	310,603	310,072	334,295	297,549	297,549	276,521	272,065	287,654	274,105	258,287	291,551
비유동부채	262,780	250,802	249,270	199,678	161,801	77,776	65,997	65,997	117,082	119,961	111,789	117,481	134,889	109,039
자본총계	241,344	244,244	257,371	272,856	253,281	248,318	219,337	219,337	214,703	210,270	203,464	187,494	162,257	157,778

감사합니다

"저희는 끊임없는 연구개발과 지적재산권 존중을 통해 얻어진 우리의 성공 스토리가 꿈을 위해 도전하는 대한민국 젊은이들에게 희망을 줄 수 있는 모델이 되고 싶습니다."