Total Solution for Industrial LCD

JNM DISPLAY CO.,LTD

JNM Display has been
an expert and market leader in the field of LCD display
since 2006, as total solutions for display.

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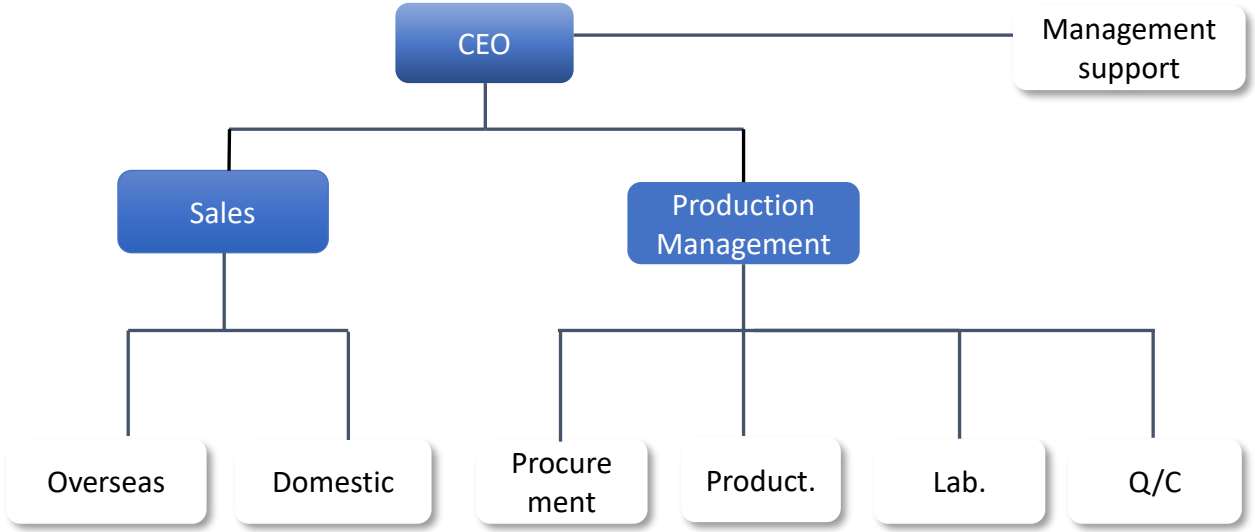
01,

COMPANY GENERAL STATUS

1. Company overview & Organization
2. History
3. Vision
4. Main product summary
   - Industrial / Commercial / Casino / Board

1-1. Company overview & Organization

Company name	JNM Display Co., Ltd
CEO	Daniel Cho
Date of establishment	17th Jun. 2006
Business Area	✓ Advertisement ✓ Casino & Gaming ✓ Industrial (Parking lot, information, kiosk, charger station etc.) ✓ Android / PC Board
Website	www.jnmdisplay.com
Address	B-607, B-111~114, 117 SK Twin Tower 119 Gasan Digital 1-Ro, Geumchecon-gu, Seoul, 08589 TEL : 02-2647-1676, FAX: 02-2647-1677



1-2. History

2006-2010

'06 JNM DISPLAY established
MP for Sunlight Readable LCD
'07 MP for industrial AD board
MP for Sunlight readable LED
'08 Sunlight readable
LED Line-up (6.4"~38")
'09 Supplied CCTV Monitor (Japan)
'10 Developed LED DRIVER for high brightness
40", 42", 55" (1,200~1,500nit)

<Exhibition>
ATI Show 2006 in UKC
COMPUTEX 2007 TAIWAN
COMPUTEX 2009 TAIWAN
Digital signage, kiosk KOREA 2010
INFORCOM 2010 HONGKONG

2011-2015

'11 Developed LCD Waterproof MNT
'12 Developed Transparend LCD Box MNT
'13 Developed DS L monitor
R&D center established
' 14 Japan BR. established (Tokyo)
Developed 42" Curved LCD
'15 32" Developed Curved LCD

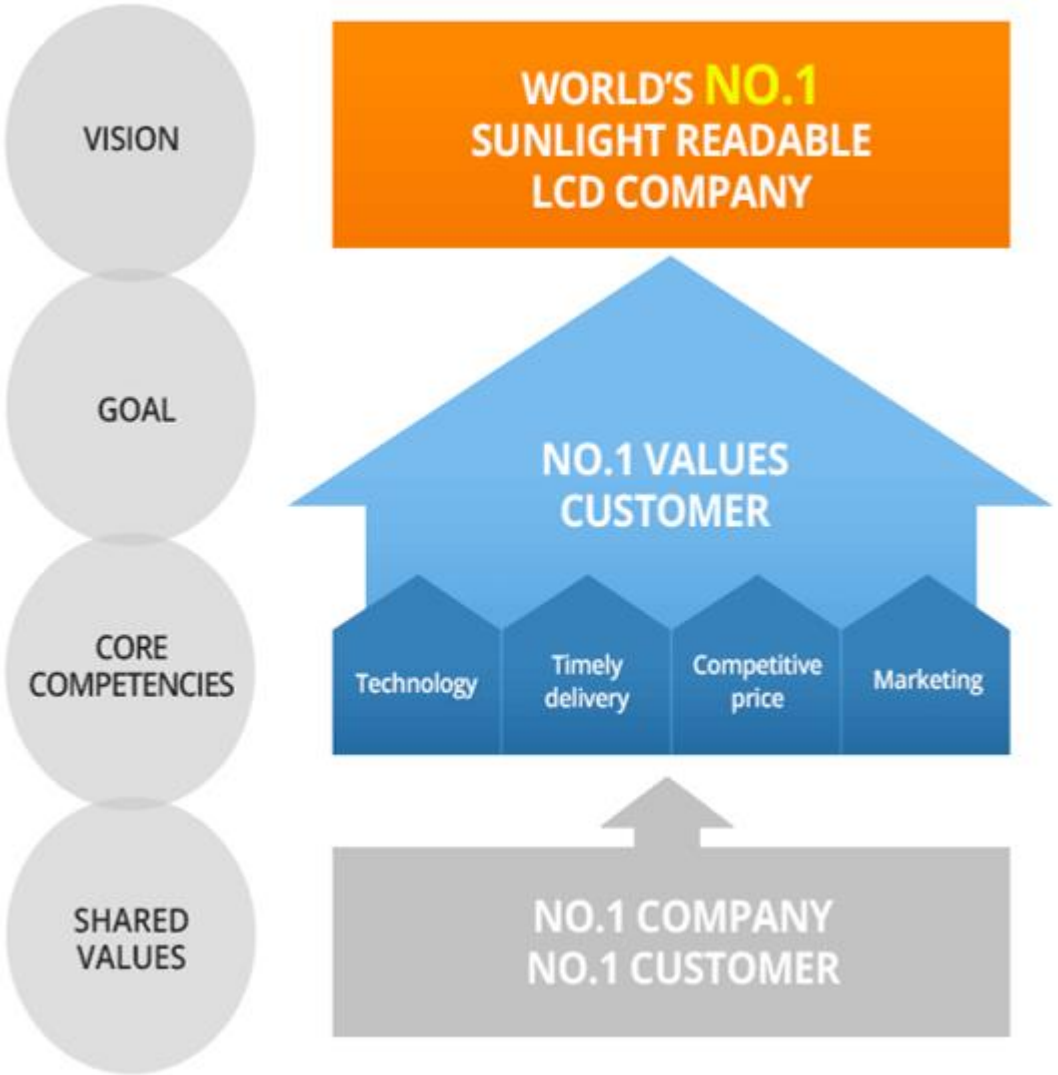
<Exhibition>
World IT Show 2011
GP JAPAN 2011
G2E 2011, 2012, 2013
ISE 2011, 2012
INFOCOMM 2012 in Las Vegas
ELECTRONICA 2012 in MUNCHEN
FINETECH in TOKYO 2013
COMMUNIC ASIA 2013
COMPUTEX in TAIWAN 2014
ICE 2014, 2015

2016-2020

'16 High Brightness MP
21.5" & 23.8"
'17 ISO-9001' Certified
Developed 43" Curved LCD
'18 Auto pay machine at Incheon Airport
Supplied Kangwon Land for Casino
German BR. established (Dusseldorf)
'19 ISO-9001' Certified
Supplied Kangwon Land for Casino in a row
Developed Android solution
'20 Developing Android B/D for SEGA
Entering Charger station Market

<Exhibition>
ICE 2016 , 2017, 2020
ELECTRONICA 2016 In MUNCHEN
ISE 2017, 2020 in Amsterdam
Embedded world 2018 , 2019, 2020 in Germany
G2E 2018, 2019
DSJ2019, 2020 in Japan

1-3. Vision

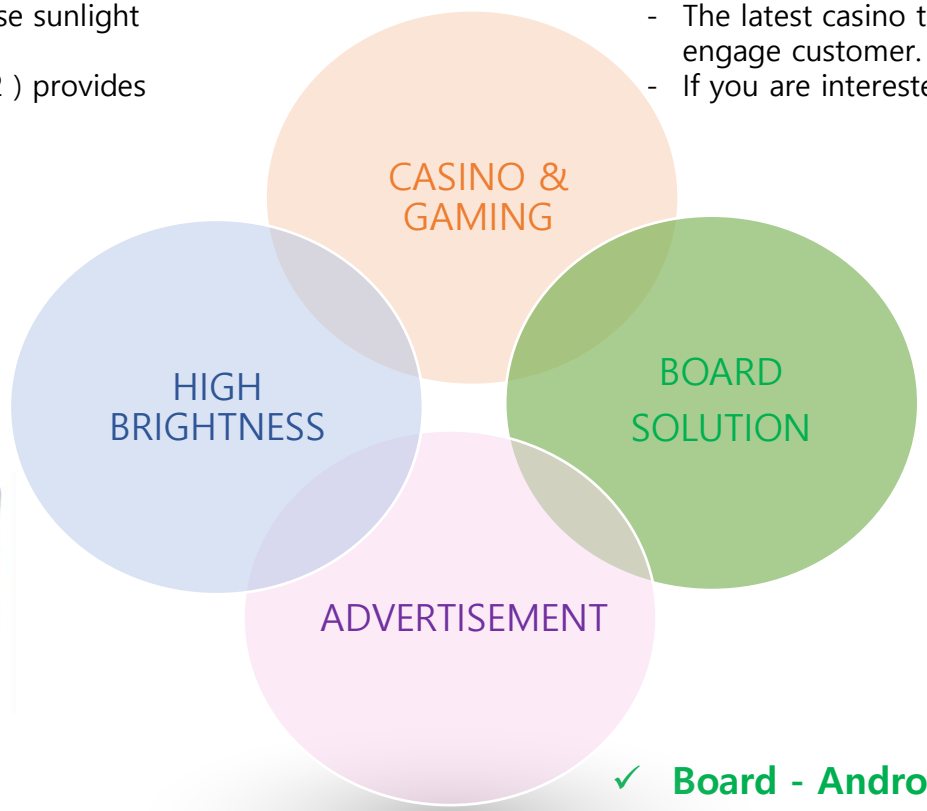


- ✓ Head office : Korea (Seoul)
- ✓ Branch office : Japan (Tokyo), Germany (Dusseldorf)
- ✓ Customer base: Germany, UK, Spain, Japan, China, USA, India

1-4. Main product summary

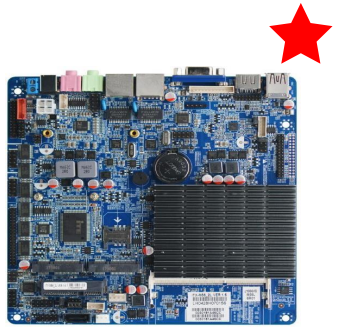
✓ INDUSTRIAL – High brightness LCD

- JNM Display is specialized in production of LED Panel and LED driver which are widely utilized in various locations such as outdoor parking lot, charger station, ATM and kiosk at drive thru.
- It's available to secure outstanding visibility under intense sunlight and we can serve you the solution for overheat.
- In addition, ultra high brightness LCD(over 2,000cd m^2) provides you with more vividness.



✓ Casino & Gaming – Open frame & Curved LCD

- As high brightness LCD manufacturer, we have been supplying 21.5", 23", 23.8", 27", 32", 43" panel or open frame monitor fit in customer's cabinet size to casino market.
- The latest casino trend is slim but high brightness and LED bar design to engage customer.
- If you are interested in, feel free to contact us.



✓ ADVERTISEMENT – Transparent LCD

- Transparent LCD operates by using ambient light without internal backlight.
- It enables you to look through the display like glass on an exhibit or product behind it.
- This product is dedicated for creative people who make the content for such signage solutions, AV system.

✓ Board - Android / PC Board

- JNM display provides you with board solution such as RK-3368, SAH-M56.
- Many customer recently adopt board solution from traditional PC since cost-cutting and convenient to use.
- With the experience of cooperation with global companies, it's possible for us to customize H/W and S/W.

02,

Main Product

1. Product type & Touch
2. **High brightness** for Industrial
3. **Transparent LCD Box** for Commercial
4. **Bar & Shelf type** monitor
5. **Board Solution** : ANDROID & PC BOARD
6. Application

2-1. Product type & Touch

Configuration

LCD Panel
LPNN TYPE

Panel + (LED driver)

Panel kits
LKNN TYPE

Panel + LED driver + AD Board

Open Frame
LONN TYPE

Panel + LED driver + AD Board + Metal (w/o Front bezel)

Closed Frame
LFNN TYPE

★Proflat type
Front waterproof
(rainwater level)

Panel + LED driver + AD Board + Metal

★ **Optional : Android & PC board (referring to 2-5. board solution)**

Touch

P-cap

High transmittance & Durability
10point Multi Touch Avail.
KIOSK, ATM, Smartphone,
Gaming etc.

Resistive

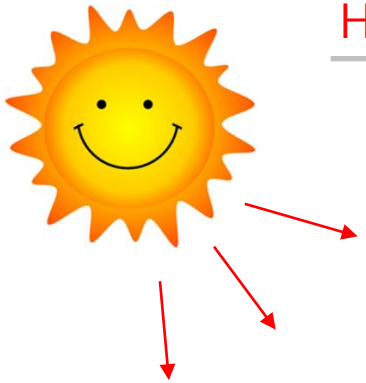
Low cost
4 / 5 point Multi Touch avail.
Method: finger, stylus pen etc

IR

Big size Avail.
Transmittance 100%

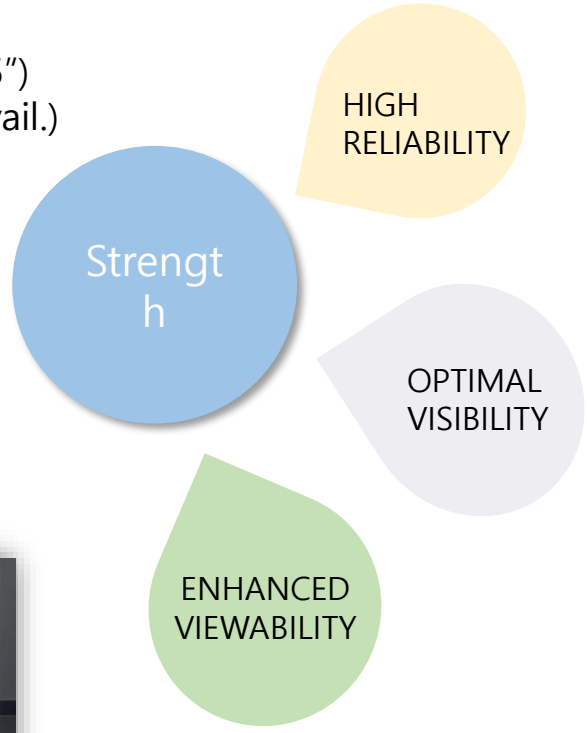
★ Touch sensor & Glass tooling(Size and Thickness)
rain waterproof for outdoor available
Optional : Optical bonding

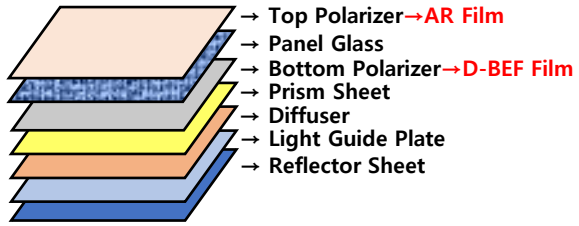
2-2. High brightness for Industrial



HIGH BRIGHTNESS (UP TO 3,000m^2)

JNM LED DRIVER for high brightness tech.
(MTBF: 50K)
Outstanding visibility
Overheat solution avail.
Low power consumption
Wide temperature and size (7" ~ 85")
For outdoor use (*Auto-dimming avail.)





Sunlight readable

TransFlective Film (Anti Reflection)
D-BEF Film
(Double brightness enhanced film)
Improve Visibility under Sunlight
For outdoor use

2-3. Transparent LCD Box for Commercial

Transparent LCD Box

Various size (7" ~ 55", BAR TYPE available)
Place a 'product' back of transparent LCD
Using BOX, Make your product Outstanding
Media board plays music fit to object
Optional : Touch
Customer reference : Adidas , Nike, The Shilla etc

*Transparent CELL can be purchased separately
(Transparent CELL + METAL GUIDE TYPE)
* Key for Box provided

It has light source in the box and enables you to look through the display
Simple switch on back of the box can easily turn on/off the power

★ Market your valuable product with Transparent LCD BOX
– Music and captivating visuals of JNM display

2-4. Bar, Shelf type monitor

Bar type – Shelf type Display

Reliable Maker (LG, Innolux, AUO)

[Bar type]
- Various application
- Special Panel Form
- Available Sizes : 15.1″~49.5″

[Shelf type]
- Full-touch screen
- Collect BIG DATA
- Easy Control
- Available Sizes : 22.9″~29″

Bar-Type Monitor

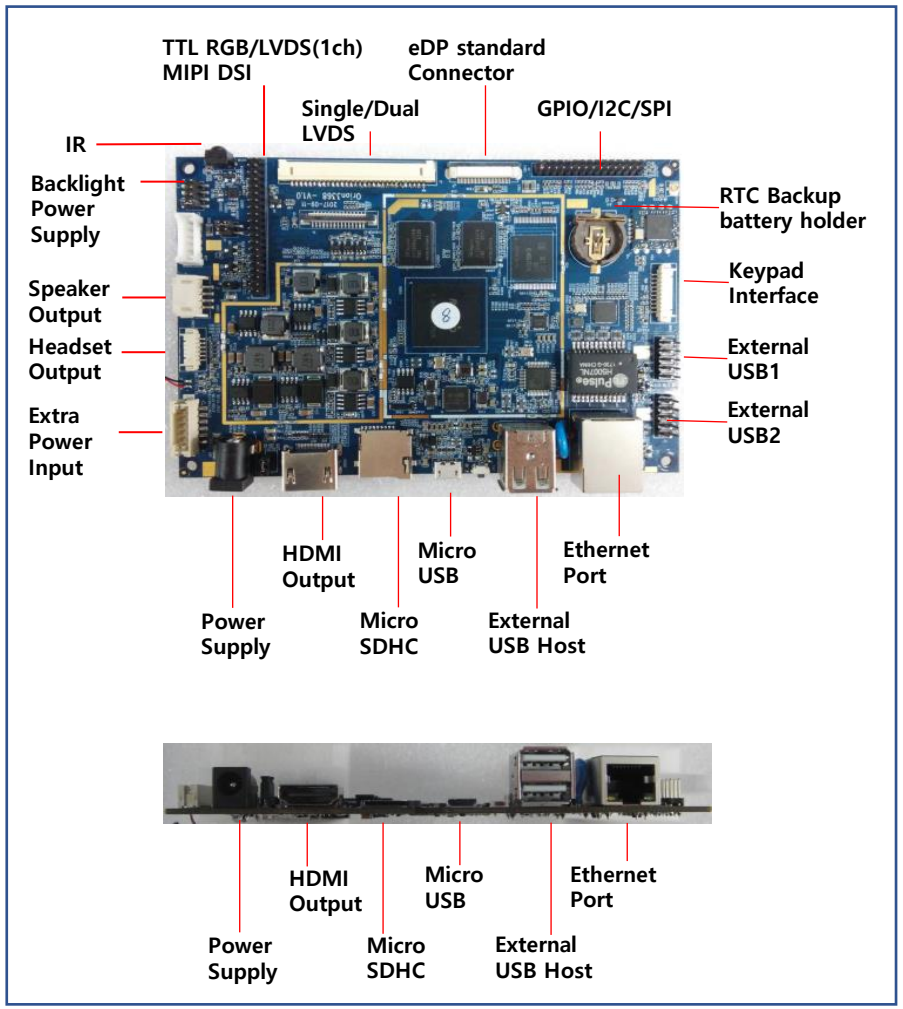
*49.5″ Closed frame monitor

Shelf-Type Monitor (In-cell touch)

2-5. Board Solution - Android Board Technical support available for User Interface

RK3368 is Low power, high performed processor for smartphone, personal internet device and other digital multimedia applications.

RockChip RK3368 Octa-core



*Feature

- 8GByte eMMC Memory (Optional up to 64GByte)
- Dual-channels TFT LCD interface with 4-layers,
- Maximum display size : 3840x2160.
- 1CH/2CH LVDS Interface for LCD – 6bits, 8 bits
- 1lane/2lane eDP interface for LCD – 1.62Gbps/2.7Gbps
- HDMI 1.4/v2.0 Support (4K2K support)
- MIPI DSI Interface
- 6-Port USB – external 2port / internal 4port
- IEEE802.3 10/100/1000Mbps with Twisted-Pare
- IEEE802.11b/g/n WIFI with Bluetooth 4.0(Optional IEEE802.11a/b/g/n/ac)
- MicroSD/SDHC 1 Slot(Max. 32GByte)
- UART : internal 1port
- External Speaker : 2W + 2W (8Ω), 2.9W + 2.9W(4Ω)
- Headset interface port(stereo headphone with MIC)
- Micro USB OTG 1port
- Camera Interface : 1port – MIPI CSI
- Keypad Interface : Back, Home, Volume+/-, PowerOn(Option B/D)
- IR Remote control interface
- Form factor: 140 x 95 x 20 mm
- I2C Interface for Touch(Optional)
- Operating temperature: 0 to 50℃
- Power: 12V DC Power adaptor, SMPS (Optional select)
- Mirror Link(Wifi Direct With Mobile (General Wi fi-Option)
- Smart Remote Control With Mobile (Power On/Off, Auto Dimming Option)
- Application : Out of home advertising, Automated Parking System Digital signage, etc

Auto pay machine
For parking lot

2-5. Board Solution - PC Board Technical support available for User Interface

SAH-M56(D6L)

Intel® Celeron J1900/2.0GHz
Quad core processor

*Feature

Mini-ITX Motherboard

- Intel® Celeron J1900/2.0GHz Quad core processor, TDP 10W
- Adopt Intel® Bay trail SOC chipset
- Integrated Intel® HD Graphics Support DirectX* 11.1, OpenGL 3.2
- 1*SODIMM memory slot, 1600/1333MHz DDR3L/1.35V, max up to 8GB
- 1 x COM (RS-232/422/485), 5 x COM (RS-232)
- 1 x HDMI, 1 x D-Sub, 1 x Dual Channel 24-bit LVDS
- 1 x USB 3.0, 7 x USB 2.0, 2 x SATA3
- 1 x mini-PCIe, 1 x mSATA
- Gigabit LAN : 1 x Realtek Lan
- 12 V DC-in
- Window 10, Window 8, Window 7, Linux Supported

Charger station

SAH-M36(I516L)

Intel® Skylake i5 6267U
2.9GHz dual core processor

*Feature

Mini-ITX Motherboard

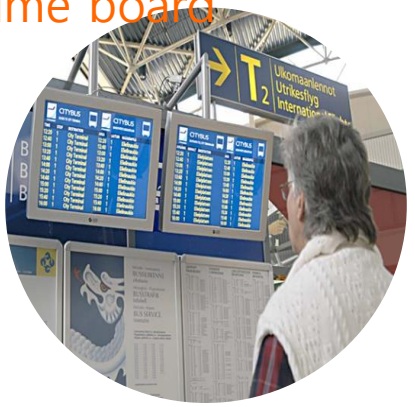
- Intel® Skylake i5 6267U 2.9GHz dual core processor
- Intel® Iris Graphics 610, support DirectX 12, Open GL 4.5, 4K/60Hz
- Adopt 6TH Gen Intel® Core Processor Platform chipset
- Integrated Intel® HD Graphics Support DirectX* 11.1, OpenGL 3.2
- 2*SODIMM memory slot, 1600MHz DDR3L/1.35V, max up to 32GB
- 1 x COM (RS-232/422/485), 5 x COM (RS-232)
- 1 x HDMI, 1 x D-Sub, 1 x Dual Channel 24-bit LVDS
- 2 x USB 3.0, 6 x USB 2.0, 1 x SATA3
- 1 x mini-PCIe, 1 x mSATA
- Gigabit LAN : 1 x Realtek Lan
- 12 V DC-in
- Window 10, Window 8, Window 7, Linux Supported

2-6. Application

Sunllght Readable recommended

Transportation	Time board (Airport, Bus terminal, railway station etc), on board display
Advertisement	Shopping mall, Department store, Discount store, Shop & Store, Bus stop, Kiosk
Point of sales	Electronic menu board, Vending machine, point on sale
Gas station	Gas pump station
Factory Automation	Display monitor
Financial	Bank, Financial exchange, Stock exchange, ATM
Control Center	Fire, Electricity, Airport control, Traffic control, Military
Office board	Conference Room, Video Conference, Meeting Room
Event & Rental	Concert , Exhibition, Convention, Show & Trade show
Education	Classroom use for AV
Entertainment	Museum, Hotel lobby, Bar, Restaurant, VIP room, Fitness club
Pipe inspection	Display monitor

Time board



Office board

ATM

Auto pay machine

Charger

Outdoor signage

03,

Production management

1. Factory, Office & Equipment
2. QA System : PROJECT / 4M / RMA
3. Certification : ISO9001, Laboratory, Design

3-1. Factory & Office

Factory Entrance

Assembly line

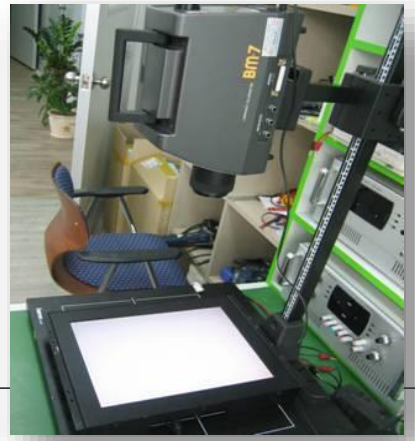
Aging Room

Warehouse

Clean Room

Management and Sales Team, Lab Office

3-1. Equipment



LCD Optical Meter

LCM Inspector M/C

Chamber

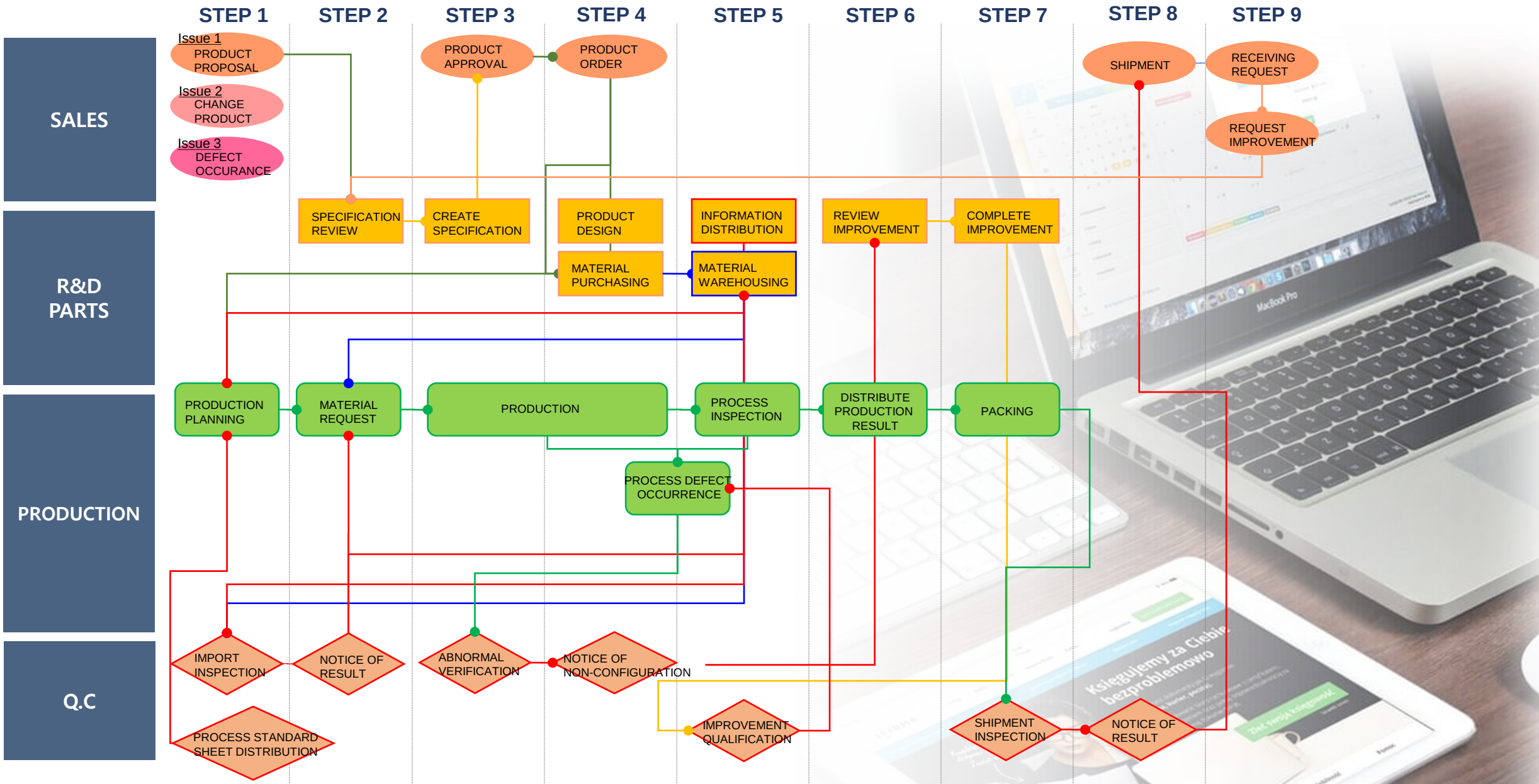
Pol. Attachment M/C

Master, MSPG-925LTH

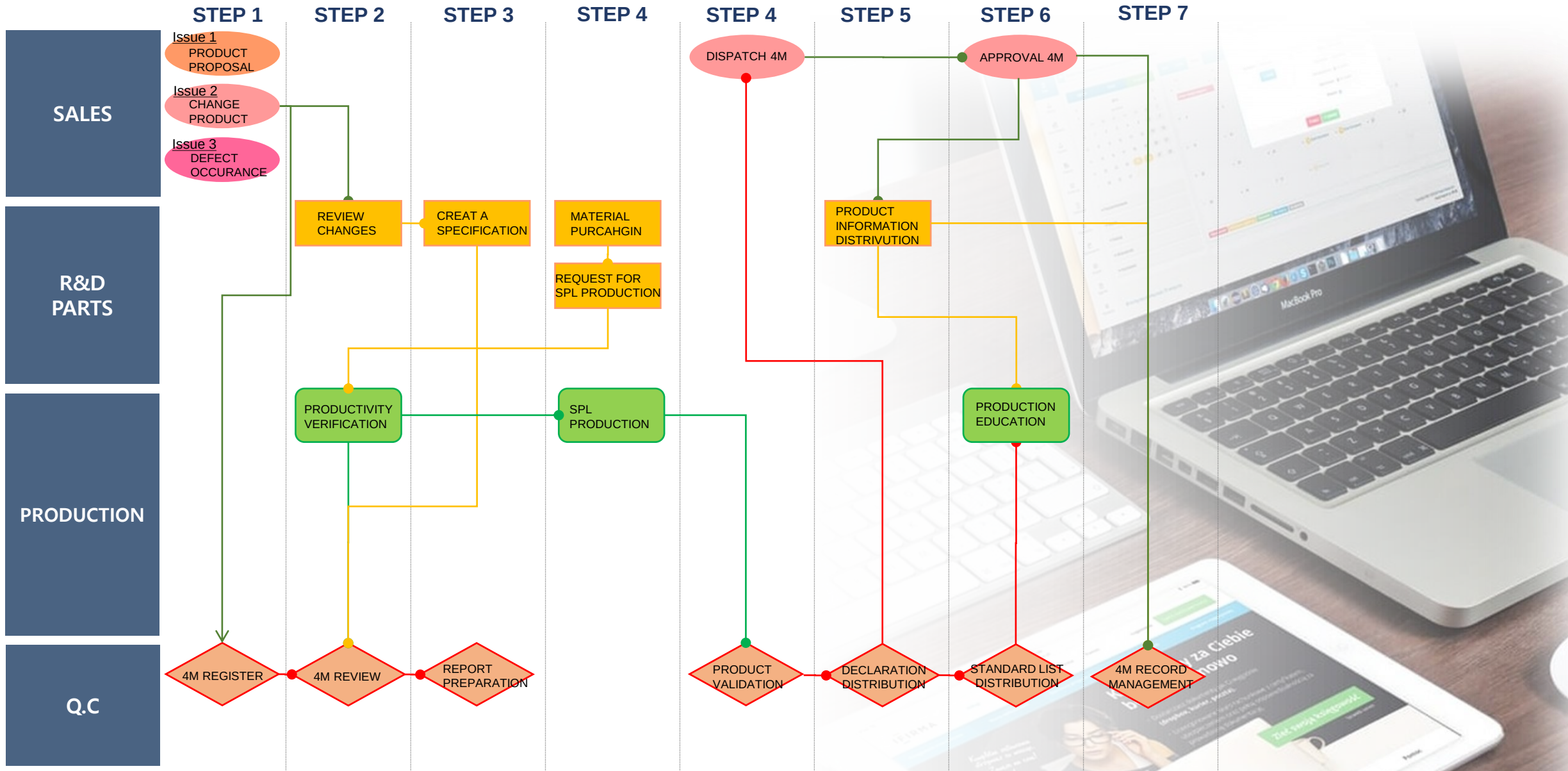
Master, MSVD-250N-20/15

Lecroy, Wavejet354

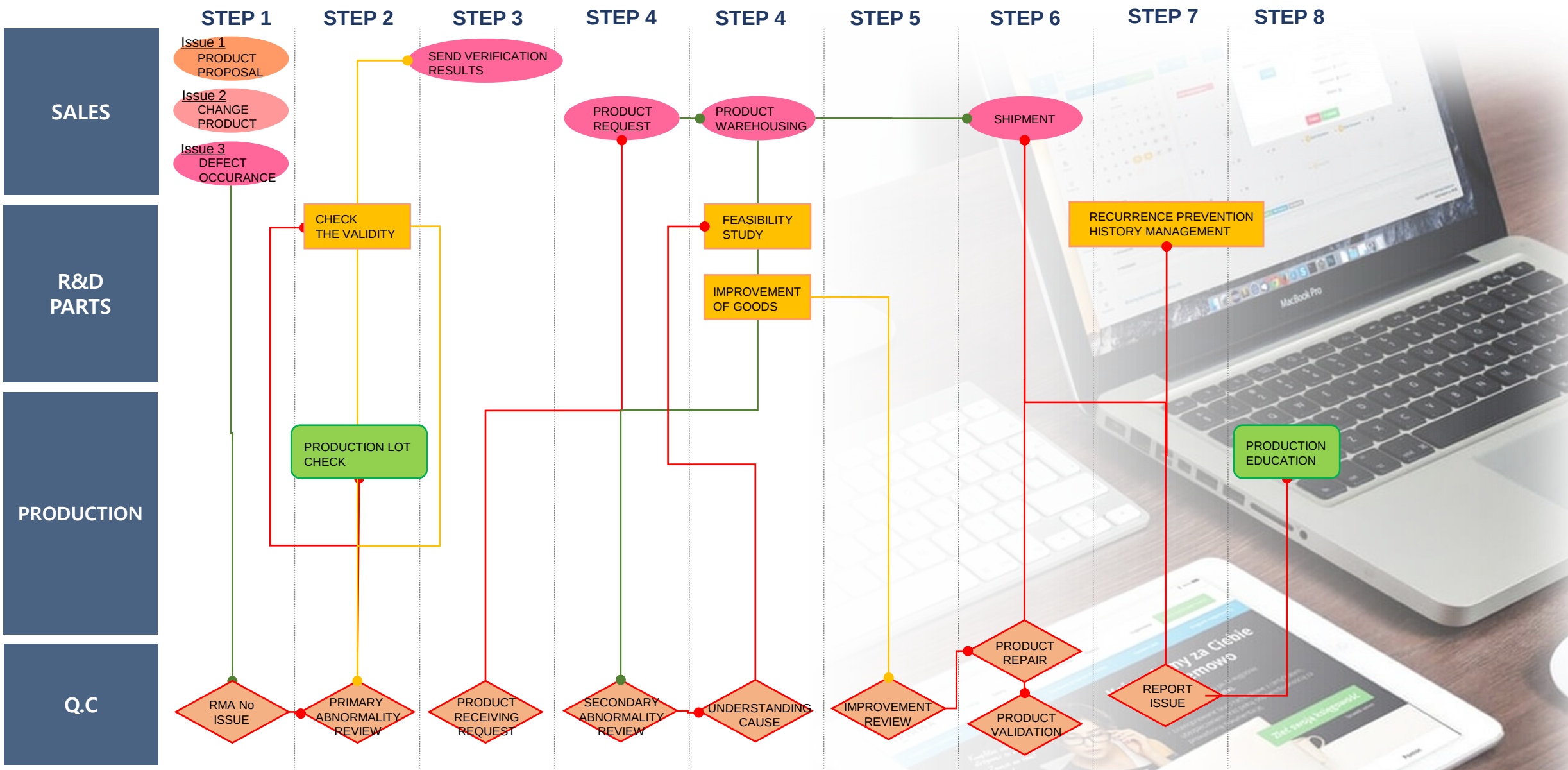
3-2. QA System - PROJECT



3-2. QA System – 4M

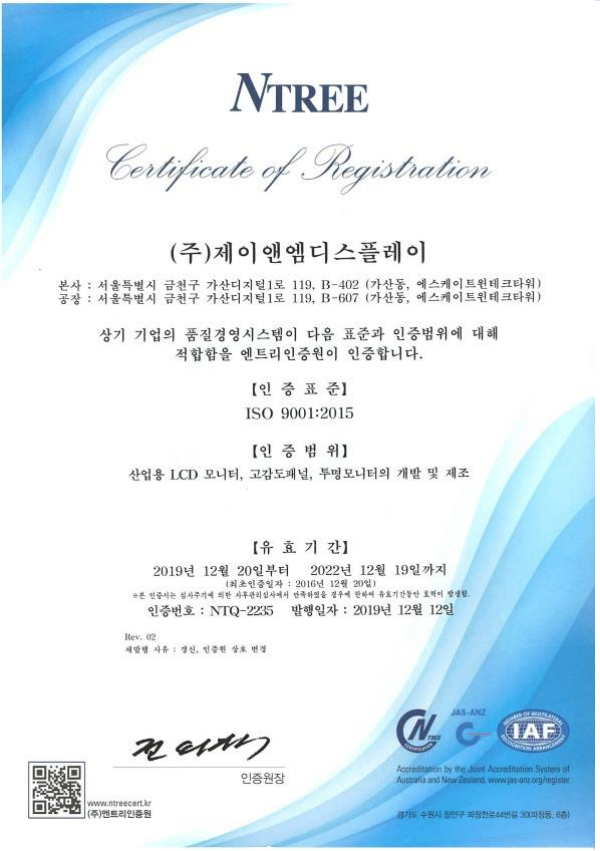


3-2. QA System – RMA



3-3. Certification

* ISO 9001:2015 , Laboratory, Design registration



NTREE

Certificate of Registration

(주)제이앤엠디스플레이

본사 : 서울특별시 금천구 가산디지털1로 119, B-402 (가산동, 에스케이트윈테크타워)
공장 : 서울특별시 금천구 가산디지털1로 119, B-607 (가산동, 에스케이트윈테크타워)

상기 기업의 품질경영시스템이 다음 표준과 인증범위에 대해 적합함을 엔트리인증원이 인증합니다.

【인 증 표 준】
ISO 9001:2015

【인 증 범 위】
산업용 LCD 모니터, 고감도패널, 투명모니터의 개발 및 제조

【유 효 기 간】
2019년 12월 20일부터 2022년 12월 19일까지
(최초인증일자 : 2016년 12월 20일)
※본 인증서는 심사주기에 의한 사후관리심사에서 만족하였을 경우에 한하여 유효기간동안 효력이 발생함.
인증번호 : NTQ-2235 발행일자 : 2019년 12월 12일

Rev. 02
제개정 사유 : 갱신, 인증범 상호 변경

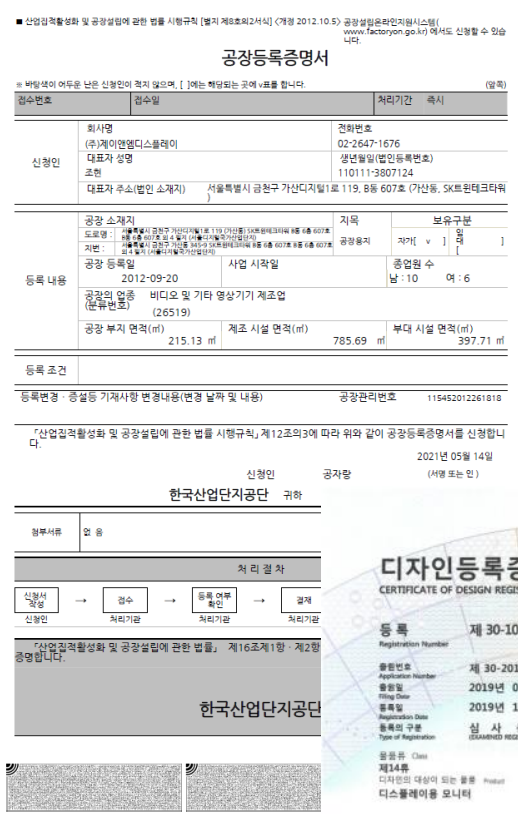
인증원장

www.ntreecert.kr
(주)엔트리인증원

JAS-ANZ IAF

Accreditation by the Joint Accreditation System of Australia and New Zealand. www.jas-anz.org/register

경기도 수원시 장안구 파장천로44번길 30(파장동, 6층)



■ 산업집적활성화 및 공장설립에 관한 법률 시행규칙 [별지 제8호의2서식] <개정 2012.10.5> 공장설립온라인지원시스템(www.factoryon.go.kr) 에서도 신청할 수 있습니다.

공장등록증명서

※ 바탕색이 어두운 난은 신청인이 적지 않으며, [ ]에는 해당되는 곳에 v표를 합니다. (앞쪽)

접수번호	접수일	처리기간 즉시

신청인	회사명 (주)제이앤엠디스플레이	전화번호 02-2647-1676	
	대표자 성명 조현	생년월일(법인등록번호) 110111-3807124	
	대표자 주소(법인 소재지) 서울특별시 금천구 가산디지털1로 119, B동 607호 (가산동, SK트윈테크타워)		
등록 내용	공장 소재지	지목	보유구분
	도로명 : 서울특별시 금천구 가산디지털1로 119 (가산동) SK트윈테크타워 B동 6층 607호	공장용지	자가[v] 임대[ ]
	지번 : 서울특별시 금천구 가산동 345-9 SK트윈테크타워 B동 6층 607호		
	공장 등록일 2012-09-20	사업 시작일	종업원 수 남 : 10 여 : 6
	공장의 업종 (분류번호) 비디오 및 기타 영상기기 제조업 (26519)		
	공장 부지 면적(㎡) 215.13 ㎡	제조 시설 면적(㎡) 785.69 ㎡	부대 시설 면적(㎡) 397.71 ㎡
등록 조건			

등록변경 · 증설등 기재사항 변경내용(변경 날짜 및 내용) 공장관리번호 1154520122618 18

「산업집적활성화 및 공장설립에 관한 법률 시행규칙」 제12조의3에 따라 위와 같이 공장등록증명서를 신청합니다.

2021년 05월 14일

신청인 공자량 (서명 또는 인)

한국산업단지공단 귀하

첨부서류	없 음

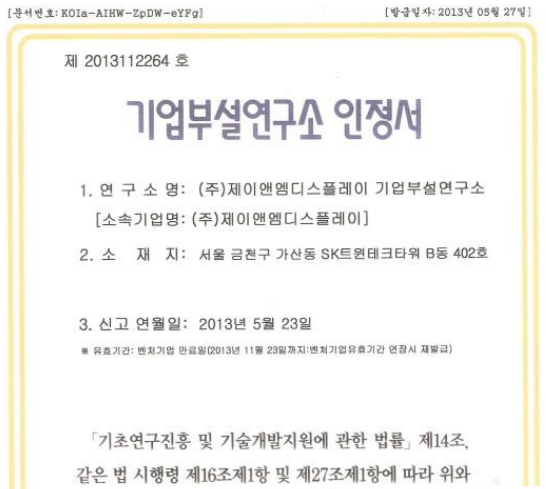
처 리 절 차

신청서 작성 → 접수 → 등록 여부 확인 → 결재

신청인 처리기관 처리기관 처리기관

「산업집적활성화 및 공장설립에 관한 법률」 제16조제1항 · 제2항에 따라 위와 같이 공장등록증명서를 발급합니다.

한국산업단지공단



[공서번호: KOIa-AIHW-ZpDW-eYFg] [발급일자: 2013년 05월 27일]

제 2013112264 호

기업부설연구소 인정서

1. 연 구 소 명: (주)제이앤엠디스플레이 기업부설연구소
[소속기업명: (주)제이앤엠디스플레이]
2. 소 재 지: 서울 금천구 가산동 SK트윈테크타워 B동 402호
3. 신고 연월일: 2013년 5월 23일

※ 유효기간: 벤처기업 만료일(2013년 11월 23일까지:벤처기업유효기간 연장시 재발급)

「기초연구진흥 및 기술개발지원에 관한 법률」 제14조, 같은 법 시행령 제16조제1항 및 제27조제1항에 따라 위와

디자인등록증
CERTIFICATE OF DESIGN REGISTRATION

등록 Registration Number 제 30-1039091 호
출원번호 Application Number 제 30-2019-0011394 호
출원일 Filing Date 2019년 03월 13일
등록일 Registration Date 2019년 12월 23일
등록의 구분 Type of Registration 심 사 등 록 (EXAMINED REGISTRATION)
물품류 Class 제14류
디자인의 대상이 되는 물품 Product 디스플레이용 모니터
디자인권자 Owner (주)제이앤엠디스플레이(110111-*******) 서울특별시 금천구 가산디지털1로 119, 에스케이트윈테크타워비동607호(가산동)
창작자 Creator 조현(721113-*******) 서울특별시 금천구 가산디지털1로 119, B동 402호(가산동, SK트윈테크타워)

위의 디자인은 「디자인보호법」에 따라 디자인등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Design Protection Act, a design has been registered at the Korean Intellectual Property Office.

2019년 12월 23일
특허청장 COMMISSIONER, KOREAN INTELLECTUAL PROPERTY OFFICE 박 원주

특허청 Korean Intellectual Property Office

QR코드로 현재기준 등록사항을 확인하세요

디자인등록증
CERTIFICATE OF DESIGN REGISTRATION

등록 Registration Number 제 30-1039089 호
출원번호 Application Number 제 30-2019-0011388 호
출원일 Filing Date 2019년 03월 13일
등록일 Registration Date 2019년 12월 23일
등록의 구분 Type of Registration 심 사 등 록 (EXAMINED REGISTRATION)
물품류 Class 제14류
디자인의 대상이 되는 물품 Product 디스플레이용 모니터
디자인권자 Owner (주)제이앤엠디스플레이(110111-*******) 서울특별시 금천구 가산디지털1로 119, 에스케이트윈테크타워비동607호(가산동)
창작자 Creator 조현(721113-*******) 서울특별시 금천구 가산디지털1로 119, B동 402호(가산동, SK트윈테크타워)

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2019년 12월 23일
특허청장 COMMISSIONER, KOREAN INTELLECTUAL PROPERTY OFFICE 박 원주

특허청 Korean Intellectual Property Office

QR코드로 현재기준 등록사항을 확인하세요

디자인등록증
CERTIFICATE OF DESIGN REGISTRATION

등록 Registration Number 제 30-1054388 호
출원번호 Application Number 제 30-2019-0011393 호
출원일 Filing Date 2019년 03월 13일
등록일 Registration Date 2020년 04월 07일
등록의 구분 Type of Registration 심 사 등 록 (EXAMINED REGISTRATION)
물품류 Class 제14류
디자인의 대상이 되는 물품 Product 디스플레이용 모니터
디자인권자 Owner (주)제이앤엠디스플레이(110111-*******) 서울특별시 금천구 가산디지털1로 119, 에스케이트윈테크타워비동607호(가산동)
창작자 Creator 조현(721113-*******) 서울특별시 금천구 가산디지털1로 119, B동 402호(가산동, SK트윈테크타워)

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2020년 04월 07일
특허청장 COMMISSIONER, KOREAN INTELLECTUAL PROPERTY OFFICE 박 원주

특허청 Korean Intellectual Property Office

QR코드로 현재기준 등록사항을 확인하세요

Thank you

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