Why Needs Seamless ?

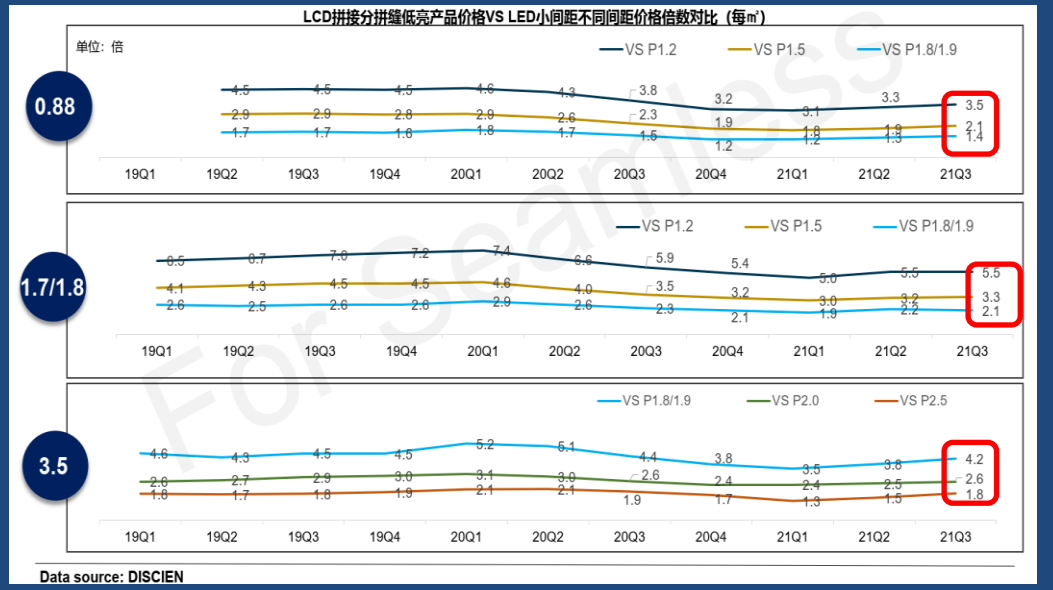
Why needs large TV?

- TV average lifespan is about 5 to 10 years. As time goes by, people regret not buying a TV with a larger size.
- Simple rule: The larger TV size, the easier to enjoy image quality.
- Consumers are looking for larger and more immersive images
  - ✓ Family：Enjoy a theater-like experience in the comfort living room
  - ✓ Games：Combination of console and large TV can make the action on the screen feel like you are on the scene
  - ✓ Bar：Watching sports events, large TV allows players to see the actions at a glance, as if they are on the field to cheer for the team
- **Immersive experience is the King**

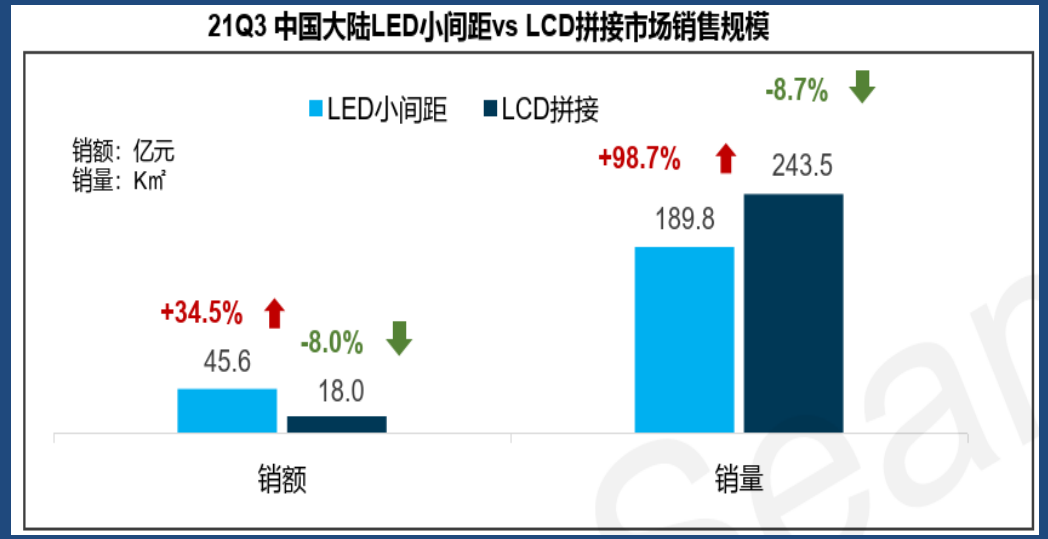
Seamless

Why needs Seamless?

- LED tiling wall vs. LCD tiling wall
  - The price per square meter of LED is much higher than that of LCD, but the market sales volume and sales growth of LED are much greater than that of LCD
  - Under the economic downturn and limited funds, consumers choose high-priced and low-resolution LEDs? Why?
  - Because the LCD tiling wall has a “ tiling seam", it is laborious to watch the image and no sense of immersion!



- Seamless Technology
  - ✓ Solve the biggest pain point of LCD tiling wall
  - ✓ Provides an opportunity to challenge the LED market
  - ✓ Destocking and expanding the market for LCD display
  - ✓ Provide a video wall that can easily enjoy high-quality images, is suitable for human eyes, and has no size restrictions



Seamless

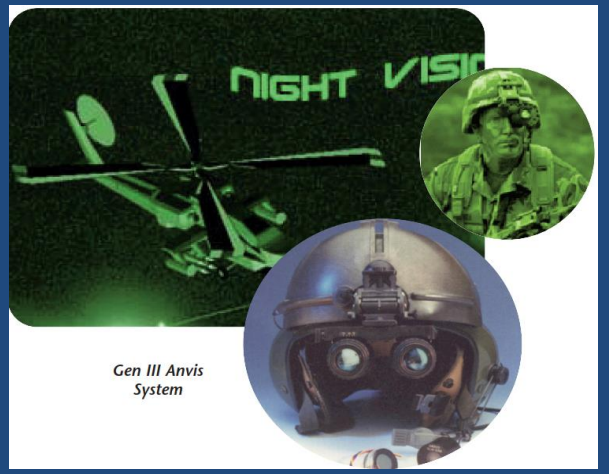
What benefits are Seamless LCD Video Wall?

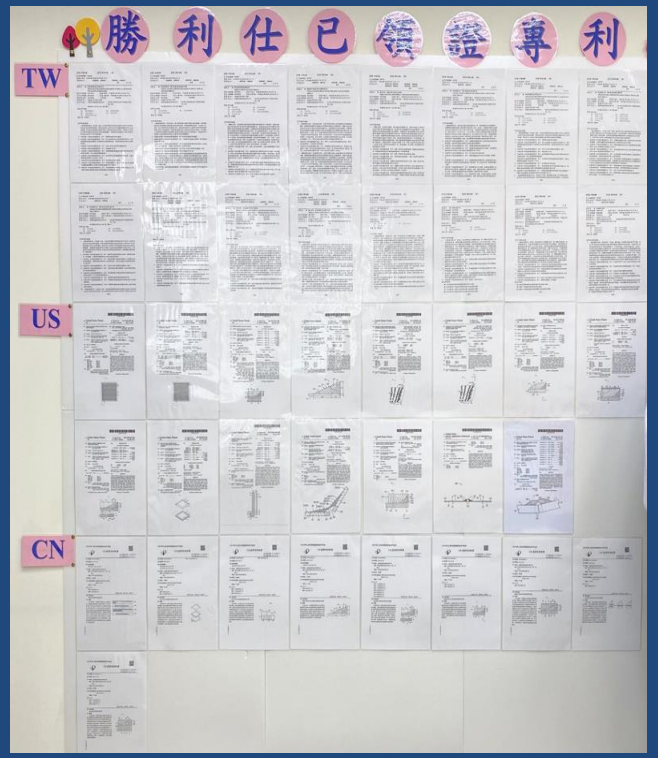
- User habits tend to convenience
  - ✓ Videotape → CD → Streaming service (Netflix/Disney+ ….)
  - ✓ Telephone → mobile → smartphone
  - ✓ Seamed video wall → seamless video wall
    - **No separation/omission of characters, numbers and symbols, easy to interpret, no misjudgment!**
    - **Complete images, high-speed moving/changing scenes like games, surveillance, emergency rescue...etc, easily capture details without missing them!**
    - **Used to seeing seamless video walls, can't go back to see seamed video wall!**

State-of-the-art technology

- Using light-guide properties of fiber optics array to form seamless video wall, applied for 53 invention patents, the world's exclusive patented technology
- The raw materials are technically cooperated with suppliers, and related materials are also used in the fields of basic science, medicine, military, aviation and other cutting-edge technology development
- Raw materials are regulated by "end-use and end-user certification"

地區	已獲證	審查中
中國	10	6
美國	15	3
臺灣	16	3
小計	41	12
	總計 ：	53

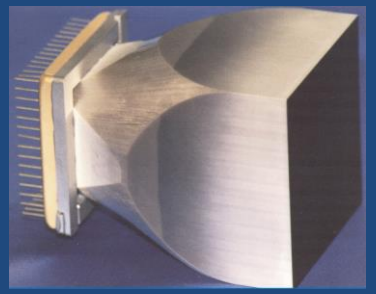




END USE AND END USER CERTIFICATION

The following information when placing an order to ensure compliance with all export restrictions. The following information shall be treated as confidential and is reserved for U.S. exporting requirements only.

Purchase Order or Quote Number:		
Part Number(s):		
Application:		
☐ Commercial/Civil	☐ Military	☐ Nuclear
☐ Commercial/Scientific Satellite	☐ Military Satellite	☐ Chemical/Biological
☐ Missiles/Space (Includes Unmanned Air Vehicles)		
Name and Address of Foreign or Domestic Ultimate End User(s): Use continuation sheet if necessary:		
Note:	Identify the specific foreign military department, foreign government agency, or foreign commercial/scientific/nuclear/satellite/etc. end user. Full name, address, and telephone number is required. Post Office Box addresses are not permitted.	



Seamless

Immersion

- E-sports players need to concentrate on tiling the three images together in their minds and integrating them into the game situation. After a long time, it is easily distracted to be “out of play "
- Seamless technology connects the screens, so that e-sports players do not be distracted, and can focus on integrating into the game situation. No matter how long the time is, they will not be “out of play" and easier to get good scores ◦
- The same technology is applied to professional simulator training, which is beneficial to trainees who can easily immerse themselves in the training scene, improve their attention, focus on the training course, and obtain better training results. ◦

Seamless Technology Inc. (STI)

https://stivision.com

Milestone

01 2013

Proof-of-Concept samples developed in Hon Hai Technology Group

02 2017

Spun off from Hon Hai to form an independent company to develop the technology

03 2021

Developed the mass production technology and file the multiple international patents

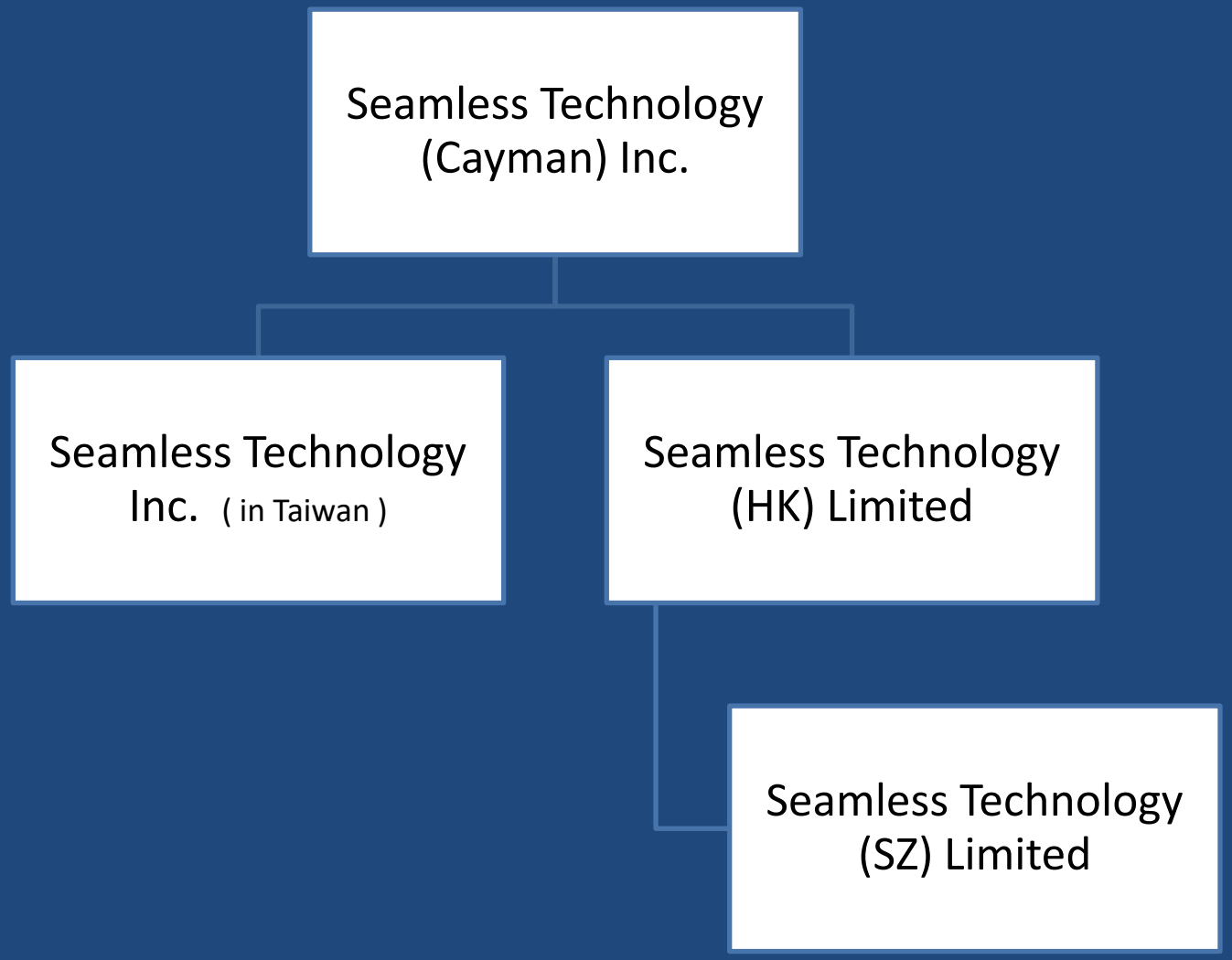
Founding Background

Tiled LCD TV walls have been widely used for their advantages of high resolution, high quality video and alpha-numerical images; low power consumption, thin dimension, ease of transport and install, low cost, and reliability. However, it suffers one disadvantage: the tiling seams between individual LCD panels.

Seamless Technology Inc. (STI) has the novel technology to address this disadvantage, demonstrated its prototype which can be mass produced to offer seamlessly tiled LCD displays for desktop applications, large entertainment TVs, meeting room presentation, video conferencing, large advertising and information billboards, and large ballroom displays.

We can tile commonly available LCD screens seamlessly to fit the customers' need. These displays maintained all the resolution and brightness and image quality of individual LCD displays, while the tiled display with large number of LCDs can show images seamlessly as a whole.

Organization



Founder

Dr. I-Wei Wu

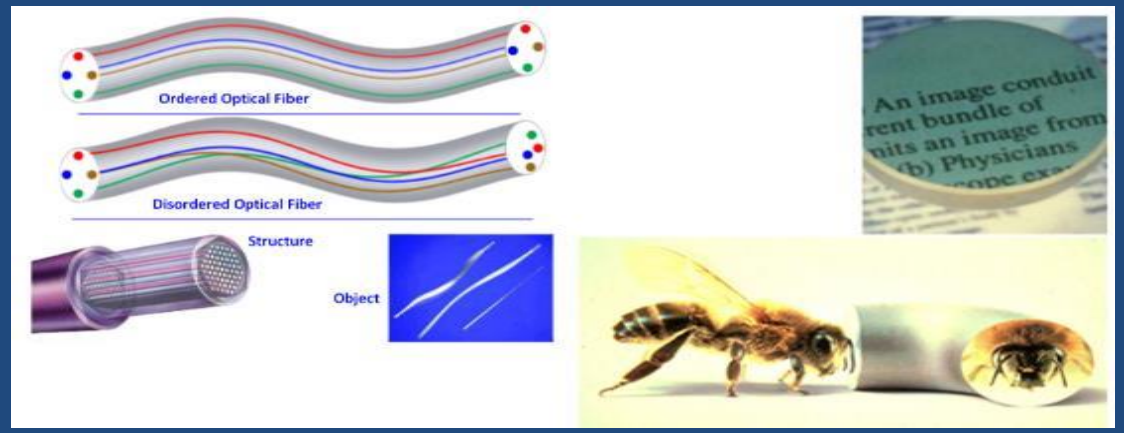
Chief Executive Officer and Chairman

With 45 years of relevant industry management qualifications

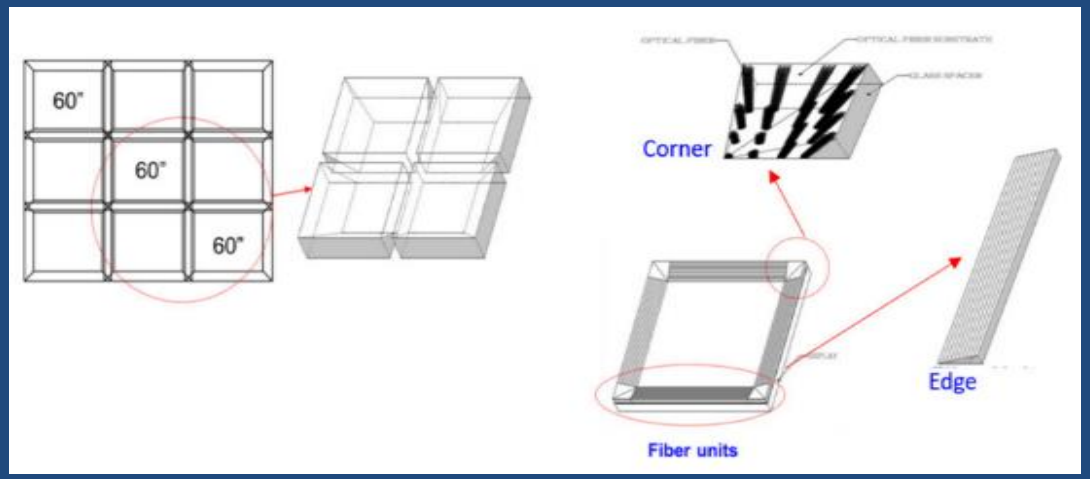
- Dr. I-Wei Wu received his B.S. and M.S. degrees from Dept Physics, and Institute of Mat. Sci. and Eng. of Tsing Hua University, Ph.D. degree from Dept. Mat. Sci. & Eng., UC Berkeley (1983), and then joined Intel Corp. to work on the first Intel's CMOS product.
- He joined Xerox PARC in 1984 to work on CMOS device and processing technology. Since 1987, he concentrated on the poly-Si TFT technology for display application, and successfully demonstrated the LTPS CMOS devices on large glass substrates; this work was presented in the 1992 SID annual meeting as the world first LTPS publication. He was then promoted to Principal Scientist.
- From 2012 to 2019 he joined Hon Hai Precision Ind. Co., Ltd. as a Group CTO. He invented seamless tiling display technology and spun-off a new venture, Seamless Technology Inc., in 2016, and served as the CEO until now.
- In 2017, he founded and serves as CEO of Century Micro Display Technology (Shenzhen) Ltd, applying the novel uLED technology he developed for cell phone applications, but failed to raise sufficient funding in 2020.
- He has published more than 130 technical papers and 140 patents. He served as a program committee or the chairman, and presented over 100 technical talks, and lectured in short courses in many international conferences and symposiums.
- He was the recipient of the 1983 John Dorm Achievement Award of the American Society for Metals, 2002 Industrial Personal Achievement Award of Taiwan Economic Ministry, in 2003 He was elected as a Society of Information Display (SID) Fellow. In 2019, he was elected as a Chinese National Science and Technology Expert.

Seamless Technology Principle

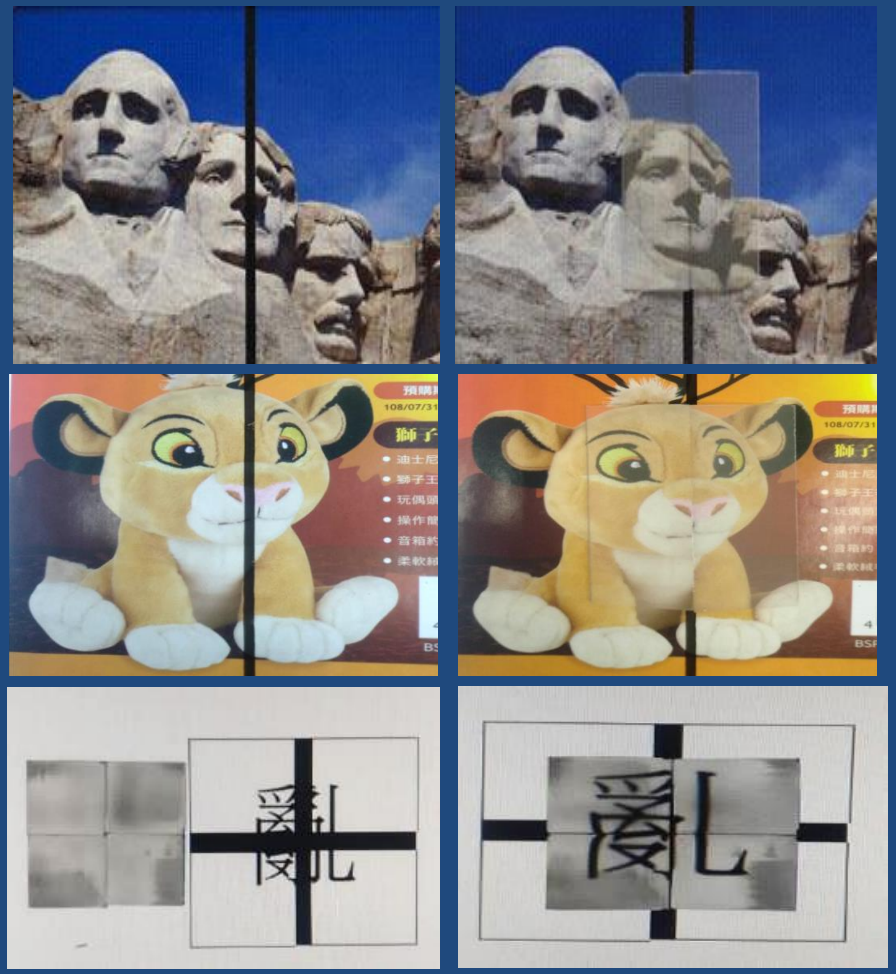
- Images can be transferred faithfully (with the highest MTF) by the fiber optics array.



- Use the light guiding properties of the fiber to shift the LCD screen.



- Effect comparison



Bezel between panels

Image shift by optical units

Intellectual Property _ 19 families，53 invention patents

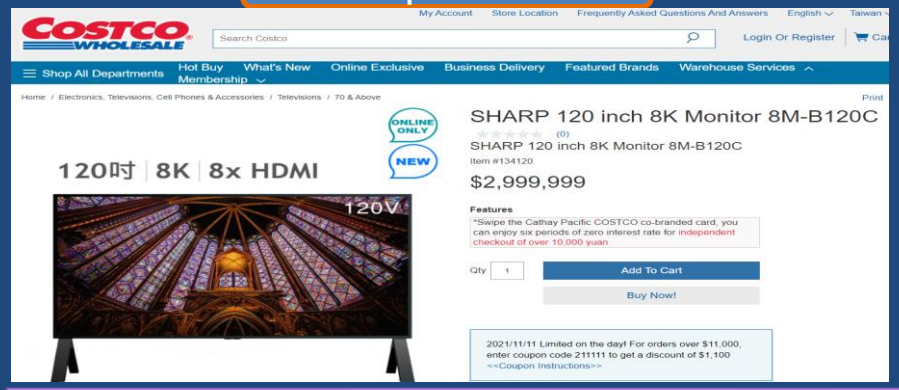
Area	Certified	Under Examination
China	10	6
American	15	3
Taiwan	16	3
Subtotal	41	12
	Total :	53

Invention Paten Wall

Market News

- 2021/10/28 Costco SHARP 120” 8K TV 8M-B120C, 7680x4320 (16:9), priced at NTD 2,999,999.

Sharp LCD TV



Seamless LCD TV

Item	Description	QTY	Unit	U/P
65", 2x2, 8K TV wall	1. Size: 2.9 m(L)x 1.6 m(W) 2. Area: 4.6 m^2 3. Diagonal: 129" 4. Brightness: 700 cd/m2 5. Resolution: 7680x4320 (16:9) 6. Tiling seam: 0.1±0.06 mm	1	set	NT$ 965,160

The same resolution with 130” display only cost 1/3 of the SHARP price (NT$ 965,160).

- 2021/9/27 Shenzhen Ledman (stock code: 300162) released 4K 138” Micro LED TV, P 0.7, priced at RMB 499,999.

Ledman Micro LED TV

Seamless LCD TV

No	Item	Description	QTY	Unit	U/P
	65", 4x1, 8K TV Wall	1. Size: 3.2 m(L)x 1.4 m(W) 2. Area: 4.6 m^2 3. Diagonal: 139" 4. Brightness: 700 cd/m2 5. Resolution: 8640x3840 (21:9) 6. Tiling seam: 0.1±0.06 mm	1	set	RMB 203,710

Similar display size, but double the resolution, only cost 40% of the Ledman price (RMB 203,710).

Application

- Seamless technology can be commercialized and present seamless visual fields to the world.
- Modularity design for the following applications are listed but not limited.
  （partial images retrieved from the web）

Multimedia Expo

Information Control Center

E-sports Triple Screen

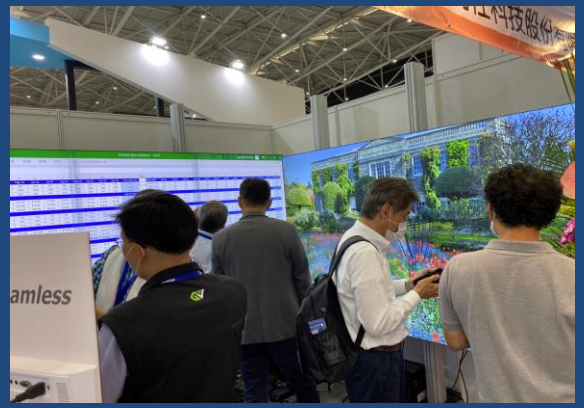
Store Message Board

Meeting Room

Simulation Training Display

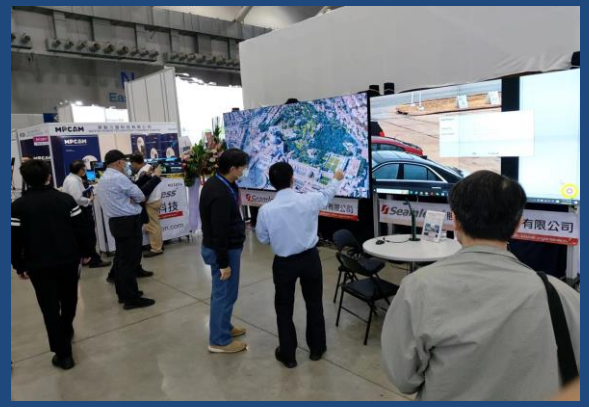
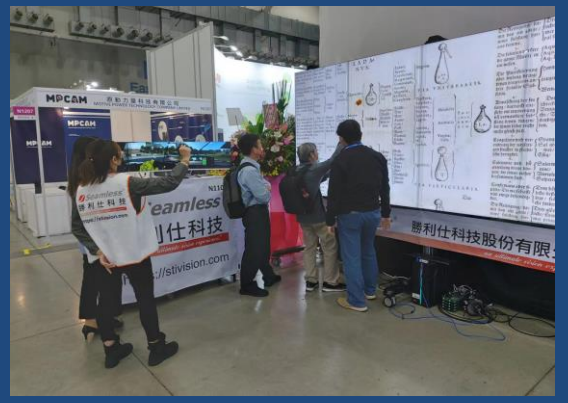
News Latest

- 2022/04 – Touch Taiwan 2022.



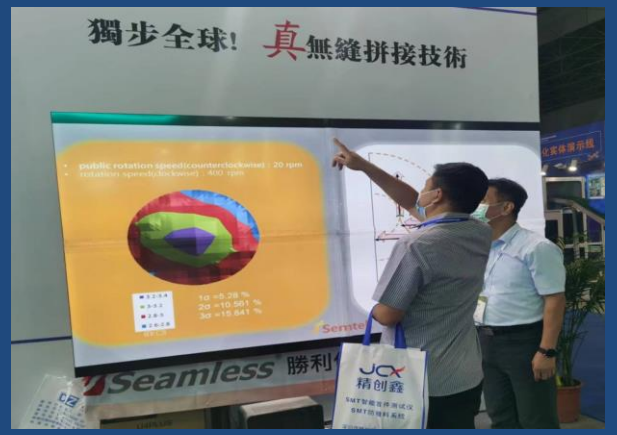

- 2022/05 – Computex Taipei 2022



News Latest

- 2022/06 – The 6th CMM Exhibition @ Dongguan



- 2022/08 – The 10th China Information Technology Expo (CITE) @Shenzen

News Latest

- 2022/10 – 165” seamless video wall set on 5F of Syntrend Creative Park in Taipei

Thank You !