# vtech

VTech Communications Ltd



# **About VTech Group**

Established in **1976** with headquarters in Hong Kong and state-of-the-art manufacturing facilities

3

14

25,300

1,600

#303

**Core Businesses** 

**Countries & Regions** 

**Employees Worldwide** 

**R&D** Employees

**HK Stock Exchange** 

### **Electronic Learning Products (ELP)**

We create innovative and age-appropriate electronic learning toys that enrich children's development and make learning fun

### **Telecommunication Products (VTT)**

With superior design and functionality, our cordless phones and other telecommunication products continue to be the number one choice for consumers worldwide

### **Contract Manufacturing Services (CMS)**

Flexibility in service, excellence in product quality, manufacturing know-how in several product categories and a strong reputation are the key factors that have made us a top 50 EMS provider globally

# **Sustainability**

### 5 Sustainability Pillars



#### **Governance and Business Ethics**

Uphold the highest ethical standards of business integrity and foster a culture of compliance throughout the company



### **Product Responsibilities and Value Chain Management**

Incorporate sustainability concepts into product design for the well-being of our customers and the society



#### **Environment**

We are committed to minimizing the potential environmental impacts from our operations



### Our People

We provide a supportive, pleasant and healthy workplace for our employees, and a caring community in workplace

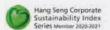


#### Society

Use our expertise and resources to support the communities



#### Industry awards received:











VTech constantly reviews and monitors its sustainability progress along the business development. We recognize that we have to build on the foundation that we have established since we started our sustainability journey in FY2006.



# 22.7%

GHG emission reduction per production output in assembly factories since FY2014



44.2%

Water consumption decreased since FY2014



14.3%

Electricity usage reduction per production output in assembly factories since FY2014

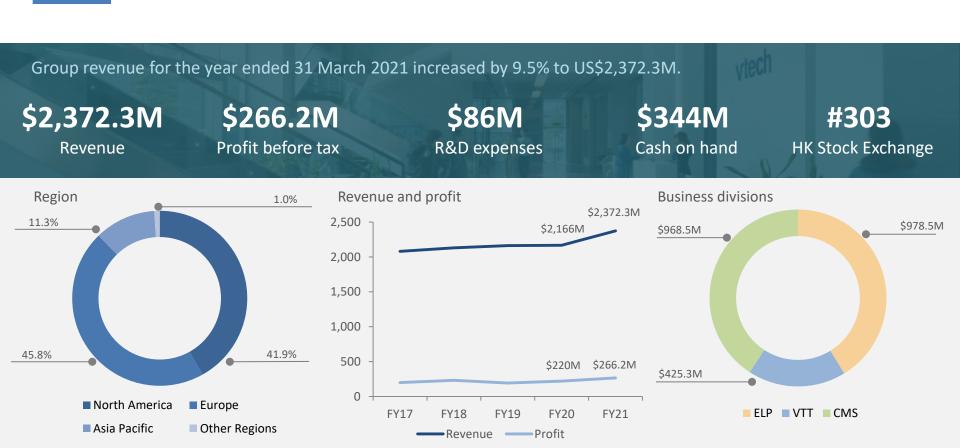


79.9%

Recycling rate of the reusable materials since FY2014

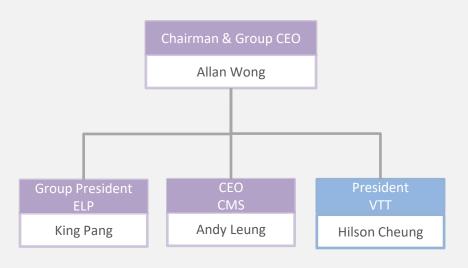


# **Financial performance**









Senior Management

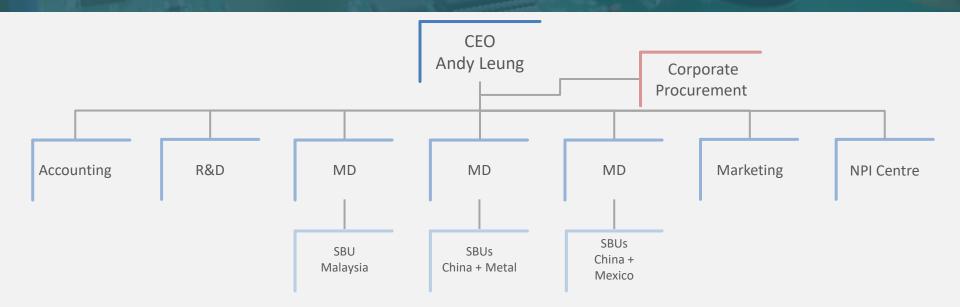
Group Executive Director



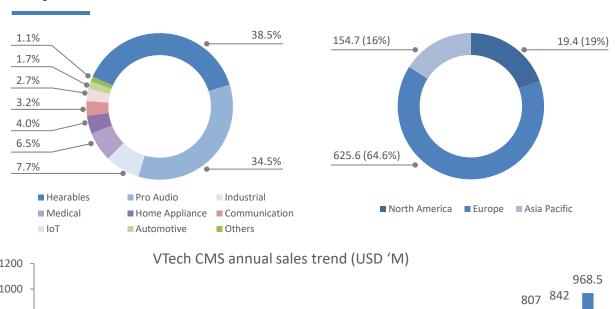
# **Organization Chart**

- Growth by Organic with Selective Acquisition
- Customers Focus
- Global supply chain management

- Flexibility in High Mix-Low Volume and Low Mix High Volume
- Full turnkey CMS service
- From concept to scale production



# **Key Performance**

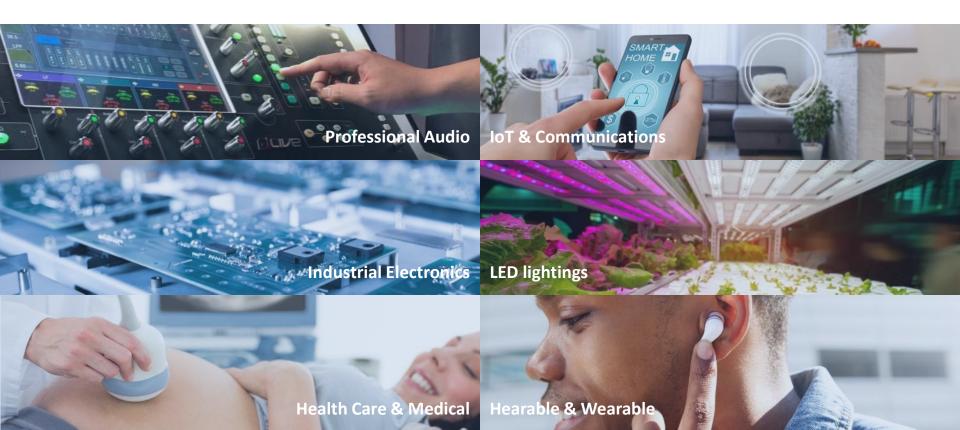








# Our customers in different industries and markets





# **Global presence**





# Manufacturing



**VTech China Manufacturing Plant** 

**100,000** sq meter

**6** manufacturing buildings

**5,500+** Employees

34 SMT lines

**VTech Malaysia Manufacturing Plant** 

**30,000** sq meter

**30+** years experiences

**1,250+** Employees

18

SMT lines





**VTech Mexico Manufacturing Plant** 

**10,000** sq meter

**45** Mins drive from San Diego

Asia+ Strategy

+1

gy CMS factory

in America

1st



# **Manufacturing Capabilities**

- 7 buildings with over 130K Sq. M. manufacturing Area
- Smart factory concept
- ANSI ESD S20.20 for all production floors
- 34+ 18 SMT Lines, State-of-the-Art Equipment
- In-housed design and fabrication for ICT, AOI, ATE, FAT

- Chip on Board in Class 1,000 Clean Room
- Class 10,000 Clean Room for precise products
- Burn-in Chambers, X-Ray Inspection, Conformal Coating
- Reliability life tests e.g. drop test, high/low temp cycle
- Intensive Core Processes Automation

**Conformal Coating** 



SMT implementation PCB: 534 x 620mm Chip size: 008004 min BGA pitch: 0.4mm



Discrete implementation PCB: 450 x 450mm Radial pitch: 2.0 / 5.0mm Wave soldering PCB: 450mm width max





# **Automation**

VTech CMS continues to enhance automation & smart technologies implementation, moving toward to the world of Industrie 4.0. Automated, smart warehouse, fully automated testing solutions, Manufacturing Information System (MIS) with big data analysis

Auto	Auto
screwing	coating
Auto	Laser
soldering	soldering
Auto	Auto
Testing	Marking

See more in our channel:









# **Metal capabilities**

Our metal shop provides one-stop service for sheet metal and assembly productions. Precision NC machines eliminate tooling needs for orders of small-quantity, high mix low volume and prototyping.

In-house tooling design and fabrications ensure effective control and monitoring on quality, cost and schedule.

VTech metal shop also serves 3rd party non-EMS business partners.

40+	100+
years experience in metal parts	press machines
2 Auto painting	8 NC punching



# **Industrie 4.0**

### VTech is moving towards smart factory



#### Digitalization

We have digitalized our processes from product level to all factories for getting real-time data.



#### Automation and robotics

Our automation experts integrate latest technologies into automation and robotics across our factories. We take the advantage of automation to replace repetitive tasks, maintain consistence quality as well as improve ergonomics for our people.



#### Smart warehouse

Digitalized smart warehouse improves logistic efficiency and reduce returns rate.



# **Quality System**

VTech CMS has an established, integrated Quality Model, which upholds our commitment to providing the highest quality manufacturing services.

#### **Quality System**







Manufacturing



2001



Environment







ISO9001

ISO13485 Certificate for Medical Devices

IATF16949

2003

Certificate for Automotive Products





Accountability







QC080000



#### Regulatory & Directives Compliance / FDA Registered























#### **Continues Improvement & Quality Sustainability**









> 1.000 in FY19



accessible via VTech's Intranet system in real time.

Our NPI Centre offers swift and customizable solutions to meet our individual customers' particular budget and schedule



## **Full Prototyping Capability**

Prototyping is an essential step in the product development process

"Prototypes help designers and developers build partial product implementations, which potential end-users or customers use to provide feedback to the development team before full-scale development begins" - Wikipedia















Addictive 3D Printing





- POC Proof Of Conc



#### 2. Design

- Feasibility Study
  ID/ME/EE/SW Drawin Schematic, PCB layout

es of NPI >

5 Stage

SERVICES

V



#### 3. Development

- DV Design Verification
  Soft/Hard tool fabrication
  BOM Generation





#### 4. Validation



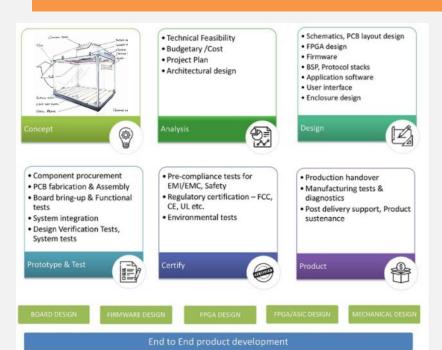


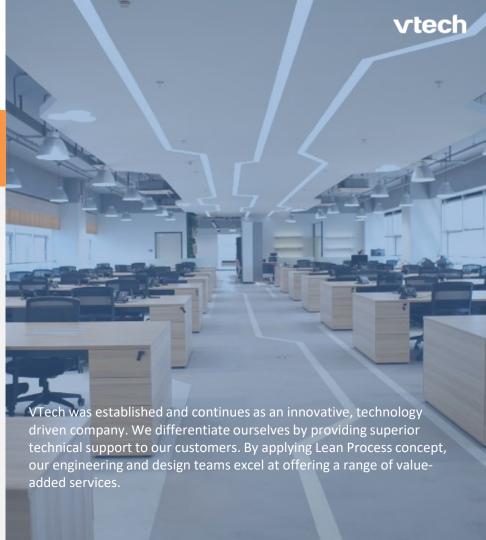
VTech CMS

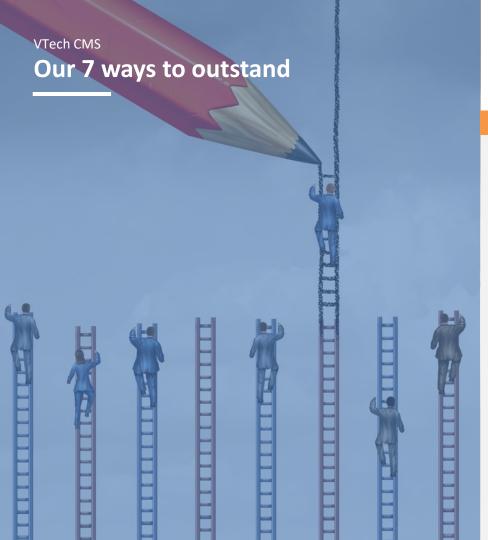
**NPI** Centre

# **Engineering Design Support**

We offer engineering design support on the periphery of our client's product, which let our clients concentrate more on core design development in their area of expertise.









VTech is one of the top 25 EMS worldwide

1	Customer focus & flexibility	SBU organization
2	Business sustainability	Green, Ethics & Integrity
3	Excellence in quality	Do It Right In The First Tim
4	Industrie 4.0	Automation & Smart
5	Total EMS solution	From concept to scale
6	Supply Chain Management	Strategic Sourcing
7	Global locations	China +

