

## VALUE PROPOSITION

### A Engineering Track Records & Capabilities.

1. A-Star : Sound-Eyes .....[ Page 20 ]
2. A-Star : i-Twin .....[ Page 21 ]
3. SPF/ST Engineering : RDIT Data Encryptions (Singapore Police Force ) ..... [ Page 25 ]
4. NEO MERIDIAN : WIMAX IEEE802.16D and 802.16E .....[ Page 18 ]
5. OEM : HSDPA USB\_Flash Modem ..... [ Page 12 ]
6. Police 5 (London) : Startrek @GPS Geo-Fencing Virtual Gantry Congestion Charges (Yr2006) .....[ Page 45 ]
7. SIIRD/EDB : EYEON @A.I. Under-water detection & recognition System ( March Yr2016).
8. Panasonic (Dec-2012) : Smart ePanel .....[ Page 22 ]

### B. Professional Engineering Practices:

1. Good engineering practices ( 6-Sigma) achieved Reliability and Quality results.
2. Good Standard procedure practices.
3. Credibility records.

### C. Technologies Knowhow, Skill set and Industrial Experiences:

1. Good Industrial experiences enable quick fulfilment and manufacturing process deployment.
2. Managing multiple resources and skills, from internal and external fulfilments.
3. Material Science Technologies knowhow & adoptions experiences @High Temperature Heat Resilient, Isolation.
4. Wireless Technologies and Radar Electronics design knowhow.

*VISION STATEMENT*

*“ Your future Technologies Solution Provider & Business Partner....”*

*MISSION STATEMENT*

*“To Develop, Realize and Commercialize client idea into reality.....”*

**CHRISTEL**

Group of companies

[www.christeltech.com](http://www.christeltech.com)

CHRISTEL Innovation Pte Ltd. (HQ)

CHRISTEL Technologies Ltd., HK

CHRISTEL Electronics Sdn Bhd.

CONTRACT  
MANUFACTURING  
ORIGINAL DESIGN  
MANUFACTURING  
FLIP CHIP ASSEMBLY

[www.christeltech.com](http://www.christeltech.com)

SINGAPORE (HQ)

MALAYSIA

HONG KONG

GUANGZHOU/SHENZHEN

TOKYO

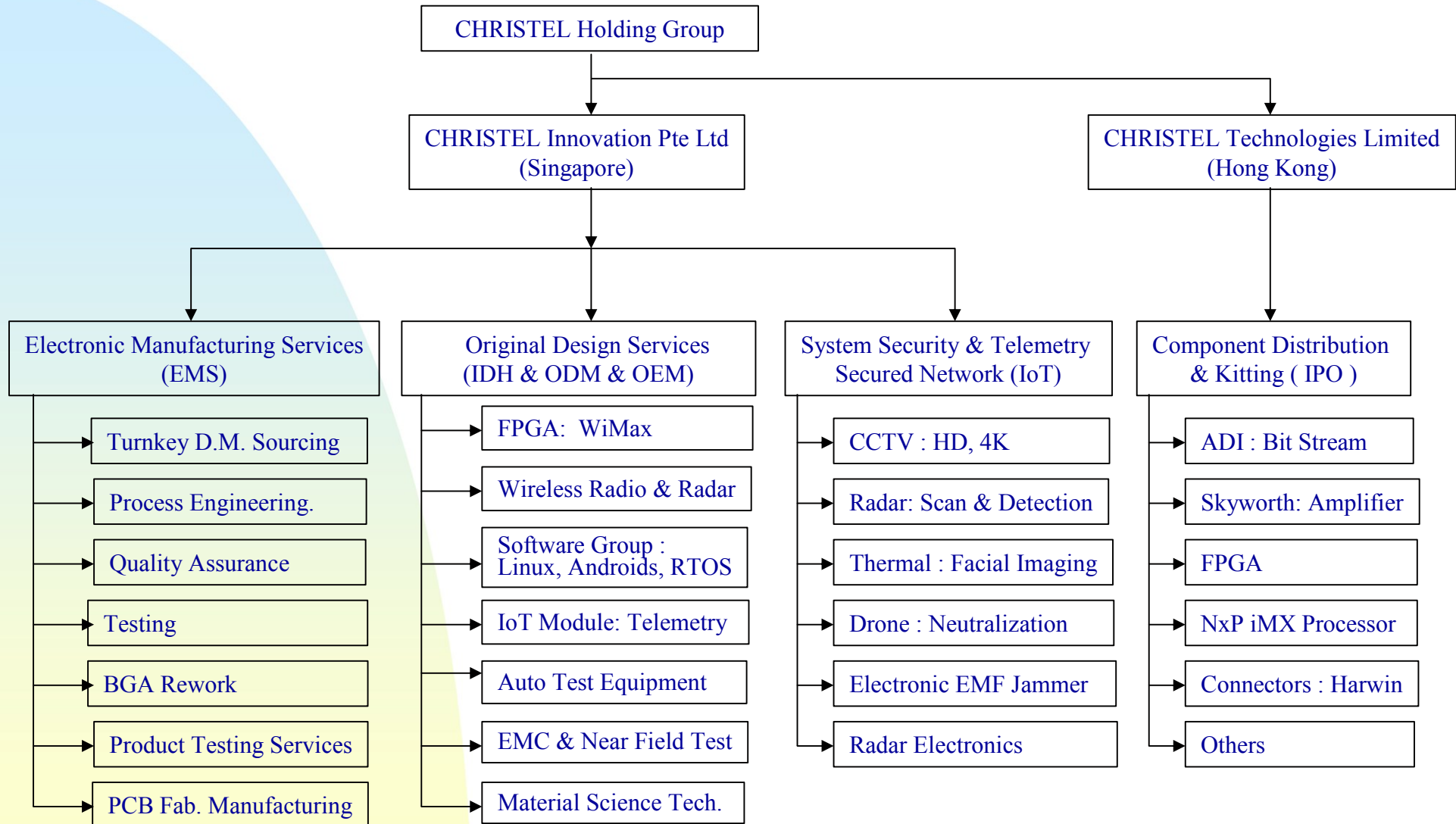
USA

EUROPE



- 2003 CHRISTEL Electronics Sdn Bhd., KL  
\* Hand phone Distribution & Consultancy.
  
- 2005 CHRISTEL Technologies Pte Ltd., Singapore.
  
- 2006 CHRISTEL Technologies (M) Sdn Bhd.,Malaysia  
\* Tokyo, Japan Sale Office.
  
- 2006 CHRISTEL Innovation Pte Ltd. (HQ)  
\* R&D: GSM, WiFi, WiMax, HDTV STB.  
\* Sales & Marketing.  
\* Contract Manufacturing Services.
  
- 2008 CHRISTEL Sale Office, Europe & USA  
\* Switzerland, Europe, Sales Office  
\* USA, Sales Office.
  
- 2009 CHRISTEL Technologies Ltd. ,(HK).  
1. R&D (Shenzhen):  
\* Contract Manufacturing Services.  
\* International Procurement Office (IPO).  
\* Electronics component Distribution.  
2. R&D (Guanzhou) A.I. Network Project.
  
- 2009 Awarded A-Star (ETPL): IDH- I-Twin Project.
- 2014 Awarded A-Star (ETPL): IDH Sound-Eye Project.
- 2015 EMS : Intel Module.
- 2017 EMS : Intel Tablet , XMM75xxx..
- 2018 Electronica 2018 I.o.T Design Methodologies speaker @Alibaba Pavilion.
- 2019 † Expanding IDH and Distribution product line.  
† Distribution Sales Representatives office.

## ORGANIZATION CHART



## SUMMARY SERVICES

1. **Quick Prototyping builds:**
  - 1.1 Small quantity builds e.g. 5 or 10 or 100 sets,
  - 1.2 Full turnkey : Sourcing & Procurement material.
  - 1.3 Electronics, Mechanical (Rapid Prototype) and Manufacturing Services, low volume high mix, fast delivery..
  - 1.4 Fast turnaround time : 1 to 2 works days prototype builds.
2. **System Integration and Original Design Manufacturing Services (ODM) Engineering Builds.**
  - 2.1 IDH Design Support : EE. ME and ID.
  - 2.2 NPI Supports.
  - 2.3 Fast Rapid prototyping within 2 works days.
  - 2.4 Product : Smartphone, Android Tablet, Wireless Radio Remote Sensing Station, WiFi, Wimax...etc.
  - 2.5 I.o.T System Integration Solution Provider and Radar Tracking Surveillance System.
3. **Mass Production Manufacturing & International Procurement & Distribution Office (IPO) Services.**
  - 3.1 Low volume and high mixed Business model.
  - 3.2 Full Turnkey source, procure, and builds, packaging services.
  - 3.3 Test Setup and Programming Development Design Support.
  - 3.4 Fast turn-around 1-5 works days procurement of ex-stock material.
  - 3.5 Provide PCBA, Box Builds Assembly, Testing and Troubleshooting services.
  - 3.6 FCC Type Approval Services.
4. **Component Sourcing & Distribution and Kitting Services.**
  - 4.0 Component Sourcing & Distributions.
  - 4.1 PCB Fabrication.



**CHRISTEL** ([www.christeltech.com](http://www.christeltech.com)) was founded in 2003 providing Telecommunication System Consultant Services, Pager and Hand phone International trading business.

He is graduated with Bachelor of Engineering (Honor) Electrical and Electronics Engineering in 1988 from Huddersfield University, UK. Major in Telecommunication & Control Engineering, and Electronic Circuitry Design.

He has more than 21 years of experience Electronic product design & Manufacturing in:

1. Radio Beacon Transmitter, Marine Antenna, 2-Way Mobile Radio, Pagers, Mobile Data Terminal, Antenna, Internet Voice Over IP, DVB-S, Internet Set-Up Box, ADSL Modem, GSM Cell-Phone, WI\_FI Phone, Fixed Wireless Broad Band, 3G\_HSDPA Modem & Card, Infrastructure System Design and Deployment in WIFI, WIMAX, & GPS Tracking System, Smartphone ...etc.
2. R & D Manager in Motorola Singapore since 1989 ~ 1998 setup China R & D Design Center in 1996; Director of Design Center in Flairis Technology Corporation; Senior RF Engineering Manager in PCI Pte Ltd., and JMA Technologies Pte Ltd. He has strong experience and exposure in R & D, Plastic Tooling & Molding, Electronic Contract Manufacturing, Quality Control, Logistic control, Financial Budget control and Sale & Marketing. Associate Member's of IEE. He has strong International marketing network in China, Europe and USA in Telecommunication products.

### Patents and Achievements Awards:

1. US Patent Award: 5,097,142 : Balancing Network For Parallel Connected Transistors. 17 March 1992.
2. UK Patent Award: 2062411 : A Communication Device, Pager; 19 June 1997.
3. Motorola Patent Submission 2 Disclosure : Year 1994.
4. Ministry Of Multimedia and Communication, Malaysia June-2008 : MyICMS886 Guest Speaker.
5. GSM Design & Manufacturing Technologies Transfer (Brunei) Official Opening Year 2008.  
[http://www.bt.com.bn/home\\_news/2008/08/25/get\\_ready\\_to\\_say\\_hello\\_to\\_made\\_in\\_brunei\\_mobile](http://www.bt.com.bn/home_news/2008/08/25/get_ready_to_say_hello_to_made_in_brunei_mobile)

### PROFILE :

1. Bachelor of Engineering (B.Eng) Electrical & Electronic Engineering, NTU @1994.
2. Master of Engineering (M.Eng) Electrical & Engineering, NUS @1998.
3. Researches in Centre for Wireless Communication, NUS , 1994 - 1998.
4. Application Manager in Avnet Pte Ltd., 1998 - 2011.
5. Application Director in Multi Component Asia Ltd., 2011- 2018.

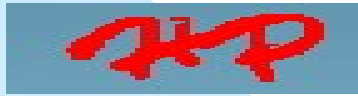
### EXPERIENCES:

1. FPGA Designer, 1994 till 2011.
2. FPGA Director, 2019 – Present.

### ROLE & RESPONSIBILITIES

1. Provide FPGA Design Services targeting at Automotive, Industrial and Commercial Applications.
2. FPGA product design focus at System-On-Chip (SOC) and Modules.

## CUSTOMER'S & PARTNER REFERENCES



WIMAX TELCO System



ETPL Commercialization partner



Never stop thinking  
Technology partnership





## CORE BUSINESS

### CHRISTEL GROUP

#### Electronic Contract Manufacturing (EMS)

##### SMT (PCBA)



##### Back-End Sub-Assembly (Box Builds)

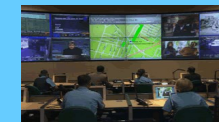


#### Original Design Manufacturing (ODM)

##### Laboratory & Test System



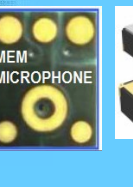
#### Technologies Consultancy



MAIN COMMAND ROOM



#### IDH & COMPONENT DISTRIBUTION



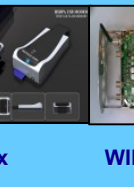
GSM/CDMA Mobile Phone



WIFI CPE



IPTV Setup Box



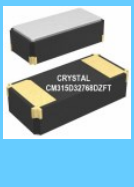
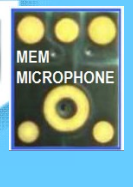
WIFI



WIMAX



GPS



### SERVICES :

#### **A. MANUFACTURING SERVICES:**

1. Printed Circuit Board Assembly Services.
2. Micro-BGA, Flip-Chip, PTH, Wave-Soldering.
3. High Mix & Low Volume Business model.
4. Full Turnkey Contract Manufacturing.
5. Testing Services.

#### **B. IDH & DESIGN SERVICES:**

1. EE : PCB Layout +16-Layers, PADS, Allegro (Product: Wimax, Smartphone, Tablet, M.I.D.)
2. ME : CAD/CAM, AutoCAD, Pro-Engineering ( Support : Soft tooling, Rapid Prototyping ).
3. SW : Embedded firmware, QNX, Android, Window, Java.
4. Test: Manufacturing Auto Test Software Development Support.
5. NPI : New Product Introduction Project Management Support.
6. IPO : International Procurement & Sourcing Support Services.
7. Microwave Radar Security Surveillance Tracking System.

#### **C. ENGINEERING SERVICES:**

1. Prototype Builds.
2. Mechanical Rapid Housing Builds.

$f(\text{CHRISTEL}) = \Sigma (\{\text{Design}\} + \{\text{Manufacturing}\})$

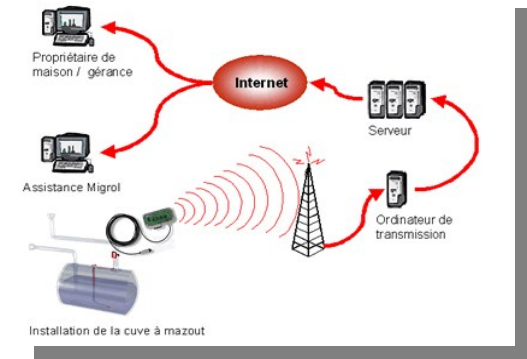
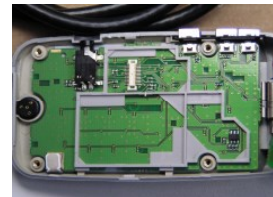
$= \Sigma \{\text{ALT} + \text{PQE} + \text{DFM} + \text{DFT}\}$

$= 6-\sigma$  (6-Sigma)

$=$  Full Integrated Supply Chain Service.

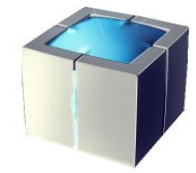
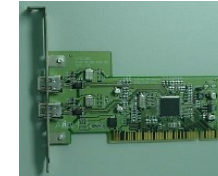
### A. WIRELESS TECHNOLOGY (e.g. GSM)

- GSM Smart PDA Hand-phone and Communicator.
- GSM/Wireless Telemetry & Security System Control.
- GSM/GPS tracking Control System and LBS.
- Wireless Software Development.
- WiMax & WiFi: Base Station & CPE.
- Military Security Encryptions Ultra-Wide-Band.
- Radar Microwaves Electronics.



### B. INTERNET-BASED TECHNOLOGY

- Internet Broadband Set-up Box, DVB-S/C/T.
- Voice Over Internet Phone (VOIP).
- Internet Web-Phone & Internet Protocol TV (IPTV).
- Fixed Wireless Broadband, IEEE802.xx & WIMAX.
- Smartphone Product Development: Hardware & Software.



### C. HD MULTI-MEDIA TECHNOLOGY

- H.264 HD Multi-Media players.
- Wireless Remote HD Multimedia playback with full touch-screen.
- HD MultiMedia Tablet/e-Book/ Advertisement Signage.



## ODM & EMS Project (YR 2006 - 2007)



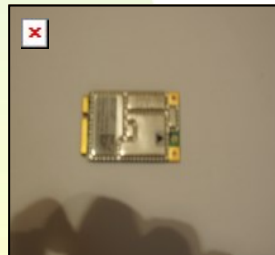
= **Model: High Speed Wireless Resolution Game Mouse.**



= **Model : Fixed Wireless Broadband (IEEE802.11 a/b/g).**



=



+



=

**Model: HSDPA (Baud rate: 1.8/3.6/7.2Mbps).  
(Christel Intellectual Properties)**

**CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)**

## WIMAX IEEE802.16D and 802.16E (Year 2008 ~2009)



== Wimax Base Station Controller



== Wimax Base Station Out-Door Controller



== Wimax + WiFi Base Station Controller



== WiFi Out-Door Controller

CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)



### SPECIFICATIONS:

- |                       |   |
|-----------------------|---|
| 1. PROCESSOR          | : QUALCOMM 28nm MDM9215                                   |
| 2. Frequencies        | : LTE TDD : B41   |
|                       | : LTE FDD : 2100 (B1) / 800 (B3)/ 2600 (B7) MHZ 850 (B5). |
|                       | : EVDO : 800 (BC0) MHZ.                                   |
|                       | : UMTS 850/1900/2100 MHZ                                  |
|                       | : GSM : 850/900/1900 MHZ.                                 |
| 1. OPTIONL SELECTIONS | : FDD LTE: BND 7  |
|                       | : TDD LTE : BND 38/39/40.                                 |
| 2. PEAK RTE           | : LTE FDD : DL/UL/100/50 Mbps (Category 3)                |
| 3. WIFI               | : 802.11B/g/n   |

CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)

## e-PAD Tablet Industrial Design (Preliminary) (Technology Design Solution Provider)



Aspect Ratio: 4:3

### Material & Finishing Comparison :

1. Magnesium Sand-blast finishing, or Polishing
2. Silver metallic Plastic spraying finishing
3. Resin Color Plastic.

Aspect Ratio: 16: 9

### COST

- Expensive
- Middle.
- Low

### REMARKS

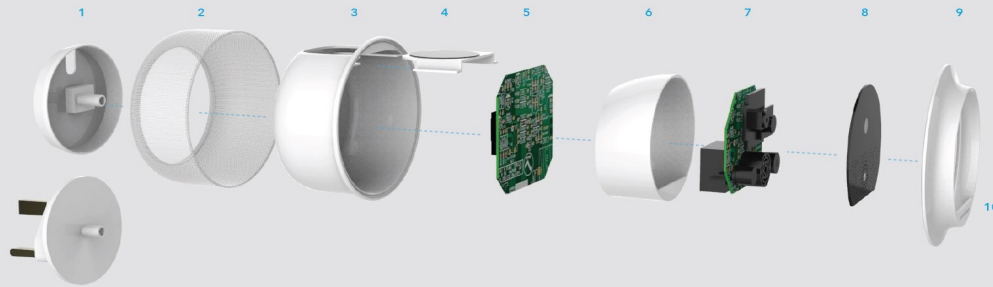
- High Grade & Classy.
- Value for money & Classy.
- No wear & Tear, cheap, Good with matt finishing

CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)



## A-STAR @ ETPL : SOUND EYES

### 04 Design for Manufacturing | Exploded View



**1. Wall Mounting Back Plate / Adapter Back Plate**  
Colour: Grey, Pantone 428C  
Finish: Nihon HN3008G  
Material: Plastic ABS

**2. Speaker Mesh**  
Colour: Grey, Pantone 428C  
Finish: Nihon HN3008  
Material: Stainless Steel

**3. Internal Body**  
Colour: Grey, Pantone 428C  
Finish: Nihon HN3008G  
Material: Plastic ABS

**4. Speaker Housing**  
Colour: Grey, Pantone 428C  
Finish: Nihon HN3008G  
Material: Plastic ABS  
\* Speaker component as per reference

**5. Base PCB**  
Colour: as per reference  
Finish: as per reference  
Material: as per reference

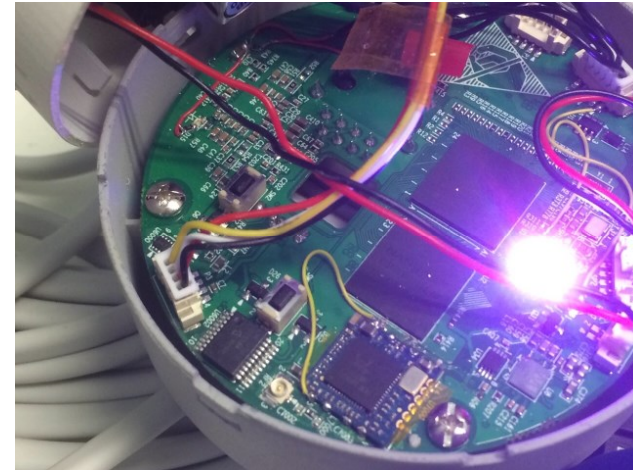
**6. Tilting Body**  
Colour: White  
Finish: Nihon HN3008G  
Material: Plastic ABS  
\* Hinge attachment as per reference

**7. Sensors PCB**  
Colour: as per reference  
Finish: as per reference  
Material: as per reference

**8. Top Cap**  
Colour: Clear  
Finish: Tinted black translucent  
Secondary Finish: White accent edge  
Material: Acrylic

**9. Top Body**  
Colour: White  
Finish: Nihon HN3008G  
Material: Plastic ABS

**10. Logo**  
Colour: Grey, Pantone 428C  
Finish: High Gloss  
Process: Silkscreen



### 02 Design Consideration | Installation

Versatile back accessories that allows wall mounting and adapter plug to power socket.



**CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)**



### 1. Original Design by CHRISTEL.

**CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)**



**Docking Charging Swivel System.**

1.00mm ±0.2mm (Target Limits)



Portable Flip Docking Clip  
(Detachable)

**Handheld Flip Swivel Adaptor**

Thickness: 16~20mm



Fold View (2\* Tablet)

CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)

## e-PAD PRODUCT ROAD MAP (ODM)

### 7" e-Pad

1. Social Enterprise.
2. RTP.
3. Low Cost.
4. IQ Kernel.
5. CMS.



Q2-2013

### 7" e-Pad:

1. Dual-Core.
2. HD.
3. 3G.
4. CTP.
5. IQ Kernel
6. CMS



Q4-2013

### 9.7" e-Pad:

1. Quad-Core.
2. HD.
3. 4G.
4. CTP.
5. HD-Camera.
6. CMS.
7. Android



Q1-2014

### 10.2" e-Pad:

1. Quad-Core.
2. HD.
3. 4G.
4. CTP.
5. HD-Camera.
6. CMS.
7. Android
8. Flip-Book. (Patented)

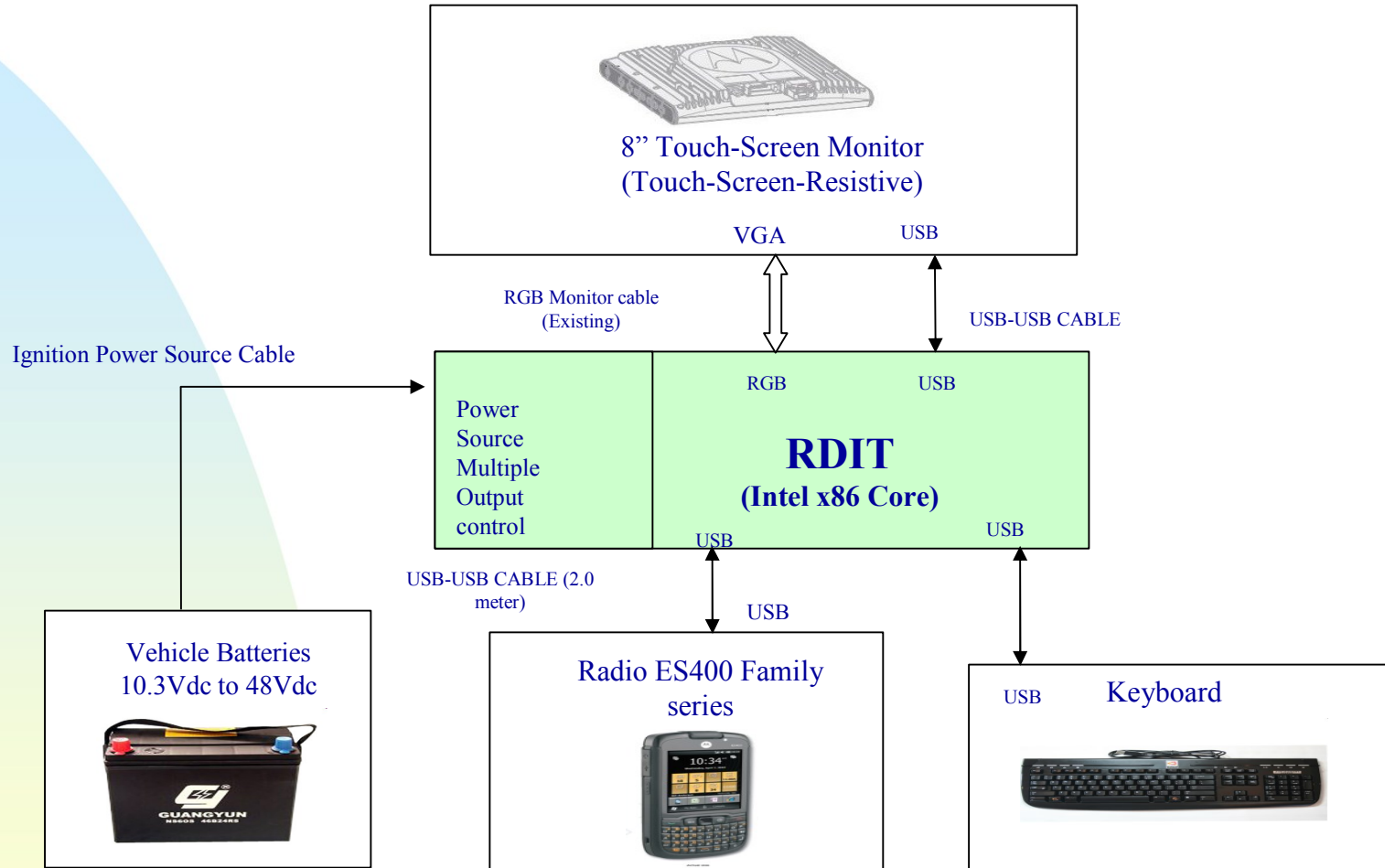


Q2-2014

PERIOD

CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)

## SPF : DATA ENCRYPTION SYSTEM BLOCK DIAGRAM



**CONFIDENTIAL INFORMATION**  
**(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)**

## DVB-S/C/T (ODM/OEM: Sept- 2008) (Inter-Box.TV GMBH)



Inter-Box.tv



CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)

### 1st Optical Navigation Button with seamless Touch User Interface on a Smartphone

Let's introduce the Taurus W820 device that bring you a new experience of using a Smartphone

A Smartphone that has all the function of enterprise solution, multimedia features such as MP3, Video Capture and Video Streaming and most complete wireless connectivity that bring you across the world with mobility. A large 3.2 inch LCD display with a sleek and handy design that operate on the simple finger touch together with a optical navigation button that shall bring a new resolution in the Smartphone era.



LONGCHEER  龙旗控股

CONFIDENTIAL INFORMATION  
(TECHNOLOGY PLATFORM DEVELOPMENT PROGRAM)

# RESEARCH & DEVELOPMENT

### SUMMARY:

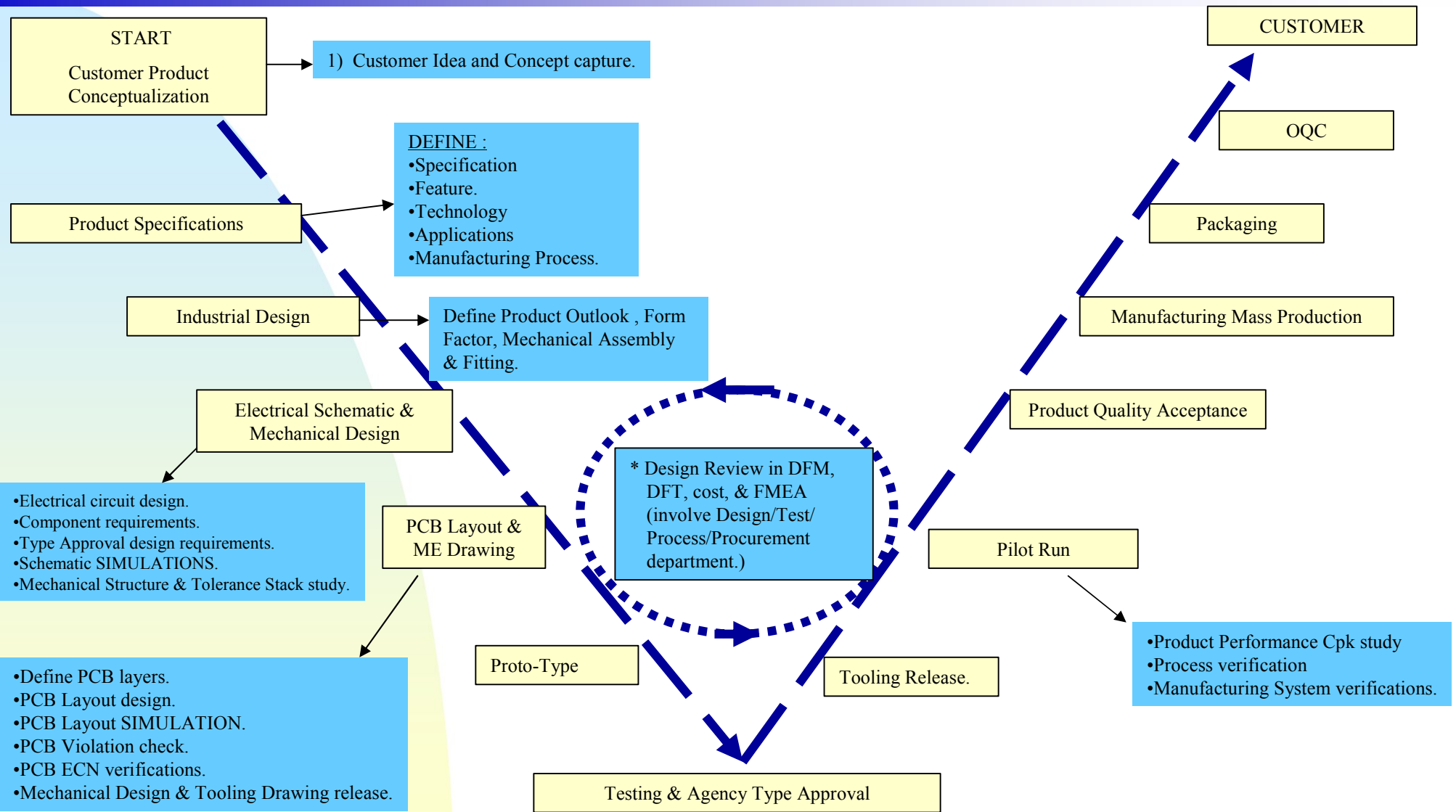
1. EE, ME, & SW.
2. PROJECT MANAGEMENT : PROTOTYPE.
3. FTA MANAGEMENT.
4. SOURCING.
5. DFM, DFT & FMEA.

### USA PATENT:

1. US Patent Award: 5,097,142 : Balancing Network For Parallel Connected Transistors.
2. US Patent Award: 2062411 : A Communication Device, Pager.
3. Mototola Submission Patent Award : Year 1994.



## R & D PRODUCT DEVELOPMENT PROCESS FLOW

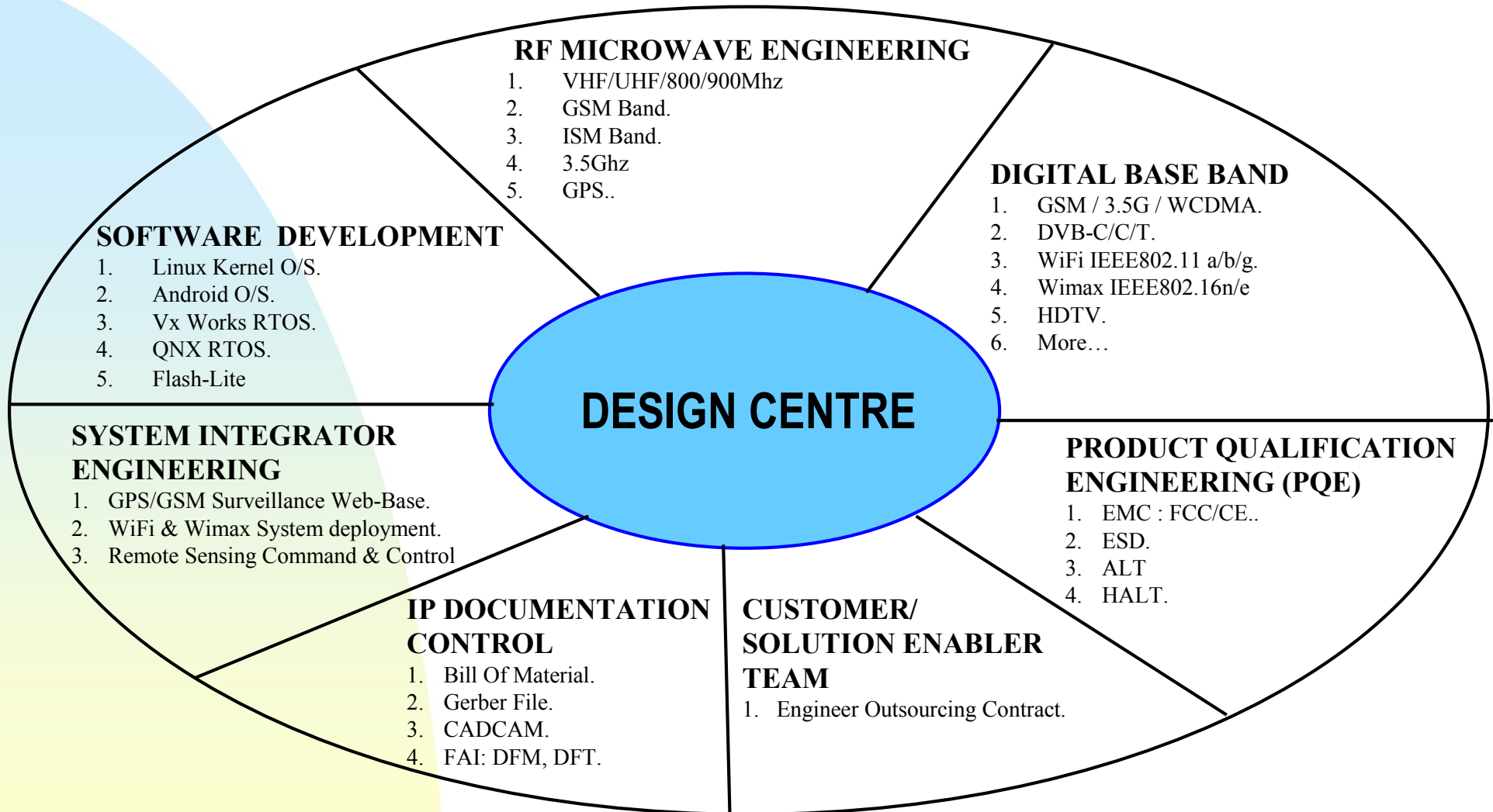




### CHRISTEL SCOPE :

1. Define : Client idea [ Concepts] into product Technical specifications & Requirements.
2. Formulate Architectures Platform and Design Methodologies.
3. Manpower Planning & Project Scheduling [ Milestone ]
4. Proposal : Project Budgeting.
5. Phase # 1.0 : Prototype # n.
6. Phase # 2.0 : Field Test [ Alpha and Beta Tests] & Agencies Preliminary Type Test.
7. Phase # 3.0 : Pilot Run.
8. Phase # 4.0 : Agencies Type Approval.
9. Phase # 5.0 : Release for Mass production.
10. Phase #FINAL : Ship Acceptance.
11. ----- Project Handover -----

## DESIGN CENTRE





**ALT  
(TEMPERATURE CHAMBER LAB)**



**EMC MEASUREMENT WORKSTATION**



**R & D DEVELOPMENT WORKSTATION  
(CMU200 , AGILENT 8960B/C)**



**MICROWAVE NETWORK ANALYZER  
(COMPONENT MEASUREMENT LAB)**



**AUTOMATIC TEST EQUIPMENT  
(ATE)  
(PRODUCT: GSM, PDA, FCC, CE...etc)**

- 1. ALT.**
- 2. HALT.**
- 3. EMC. (RADIATED & CONDUCTED)**
- 4. ESD. (+/- 8kV TO 12KV).**
- 5. SQE. (Software Quality Engineering)**

### PRODUCT RELIABILITY TEST :

- 1.1 **TEMPERATURE AND HUMIDITY TEST:**
  - -30degree to +80degree @humidity of 90% ~ 95%.
- 1.2 **AIR-PRESSURE TEST:**
  - N.A.
- 1.3 **DROP-TEST:30**
  - 5 Feet height.
- 1.4 **RELIABILITY TEST:**
  - Accelerated Life Test simulated 5 years life span test.
  - ESD Test.
- 1.5 **VIBRATION TEST:**
  - Sinusoidal and Random vibration test.
- 1.6 **EMC TEST & FTA:**
  - According to FCC part: C , and ETSI Standard.



Humidity & Temperature  
Cycle Chamber -70C ~130C



Shock Test Chamber

### EMC Laboratory.

- Emission Test in accordance to EN55022 class B and FCC Part 15B class B , Pre-Scanning Services
- Radiated emission measurement
- Conducted EMI Measurements
- CE Agency Type Approval submission management Services.
- Trouble-shooting and rectifications services.

### ESD Laboratory.

- Immunity Test accordance to EN55024 , Pre-Scanning Services.
- EN61000-4-2 Electrostatic discharge Measurements.
- EN61000-4-3 Radiated Immunity (4 sides).
- EN61000-4-6 conducted immunity.
- Trouble shooting and rectifications services.

### RF Shield Room.

- Provides >60db Isolations >1,000Mhz.
- RF tuning.

### Agency Type Approval Services.

- Various Countries Type Approval Submission Management Services e.g. FCC, IEC, BS, Korea.....etc.

### EMC SHIELD BOX.

- Control Environmental Open Field EMC measurements.



### A. PCBA SERVICES.

### B. BOX BUILDS SERVICES

#### SUMMARY:

1. CERTIFIED ISO9002, QS9000 and MDD.
2. LEAD\_FREE PROCESS.
3. ADVANCE MANUFACTURING PROCESS : ROHS.
4. CLEAN ROOM : 10K & 20K.
5. MANUFACTURING INFORMATION.
6. INTEGRATED TEST SYSTEM.
7. RF TEST SYSTEM.
8. RELIABILITIES.
9. RMA.
10. SINGAPORE HIGH VALUE ADD BACK-END TEST SUPPORT.





## TANGKAK, JOHOR, MALAYSIA



## BOX BUILDS SERVICES : TESTING



**JTAG PROGRAMMING**



**PERSONALITY PROGRAMMING**



**Fixed Wireless Broadband**  
**(IEEE802.11 a/b/g)**  
**Smartbridges: airHAUL**



**Fixed Wireless Broadband**  
**(IEEE802.11 a/b/g)**  
**Smartbridges: airCLIENT**



**RF MEASUREMENT**



**RF SYSTEM MEASUREMENT**  
(RF Power, Sensitivity, Ping..etc)

## BOX BUILDS SERVICES : RMA



X-Ray Machine



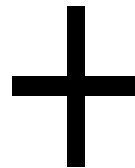
Inspection Machine



Micro\_BGA Rework Machine









Tester



Repaired PCBA



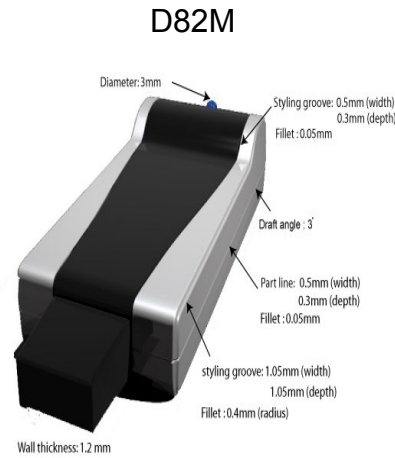
Repaired Unit

-  1. *Customer New Product Bill Of Material to CHRISTEL.*
-  2. *CHRISTEL provide Sourcing & Costing Management.*
-  3. *CHRISTEL Buy / Sell Material Procurement & Planning.*
-  4. *Box Build.*
-  5. *Direct Drop Ship to customer.*
-  6. *After Sales & Service Repair Support.*

## PRODUCT BRANDING

## PRODUCT BRANDING ROAD MAP (YEAR 2009)

SMARTPHONE  
FEATURE PHONE &  
MODEM



March

April

May

June

July

August

Sept.

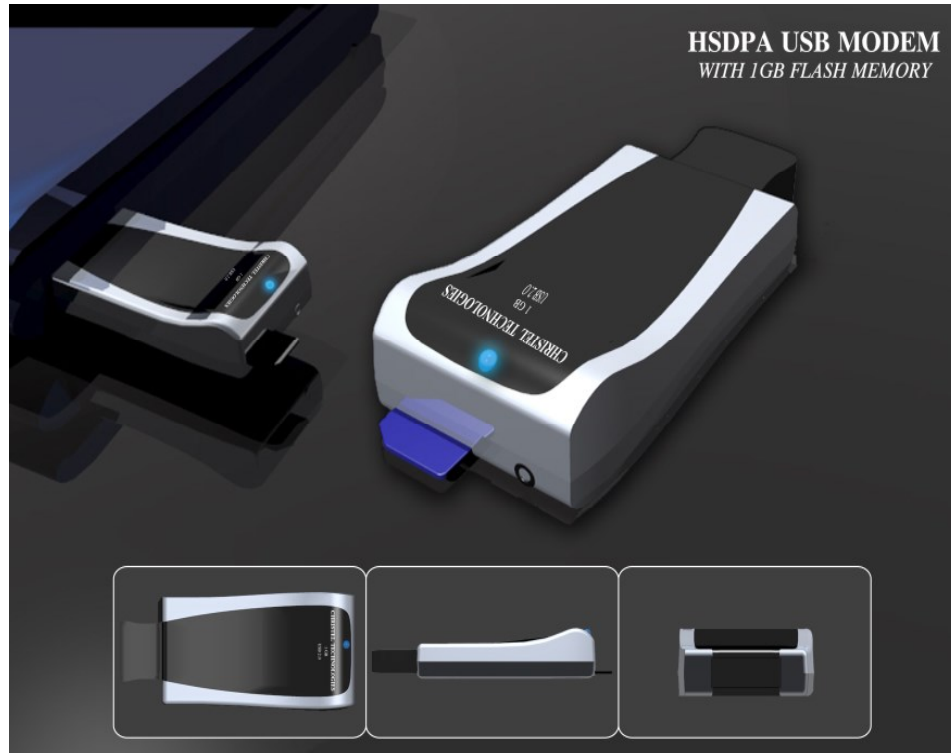
Oct.

Nov.

Dec.



**MODEL: D80**



**MODEL: D82M**

**Model: HSDPA 1.0G USB MEMORY MODEM**

#### STANDARD FEATURES

1. Internet Access (7.2Mbps).
2. Send & Receive Email. & SMS.
3. New unread SMS message indicator & Message folder.
4. Sent and Draft SMS message folder.
5. SMS archived folder.
6. RF Signal Strength & Connectivity Status Indicator.
7. Preferred Network Selectable fields: HSDPA(Default) /UMTS/EDGE/GPRS connection Dialer Pad Manager. Phone Book (\* Option for Voice Modem).
8. Receive calls (\*Option for Voice Modem).
9. Dialer Pad (\*Option for Voice Modem).
10. Original & Terminate calls (\*Option for Voice Modem).

#### SMART & COMPACT FEATURES

1. Plug & Plays.
2. Auto run functions no user configuration requires.
3. High Speed read & write access internet data (7.2Mbps).
4. Internal built in 3.5GSM Antenna.
5. Auto Detection all required Drivers in the PC.
6. Auto installation of Drivers to PC.
7. Auto pop-up of PC Connection Manager Menu screen.
8. USB\_2.0.
9. 3GSM/GSM SIM Card.
10. Earphone Jack (\*Option for Voice Modem).
11. Internal FLASH Memory (\*Option 1.0G or 2.0G) storage,
12. Dimension: 84.5mm x 35.5mm x 18.6mm.
13. Gross weight: 40g.





# CHRISTEL

## STARTREK

REMOTE SENSING COMMAND & CONTROL CCTV VIDEO SECURITY SURVEILLANCE TRACKING SYSTEM

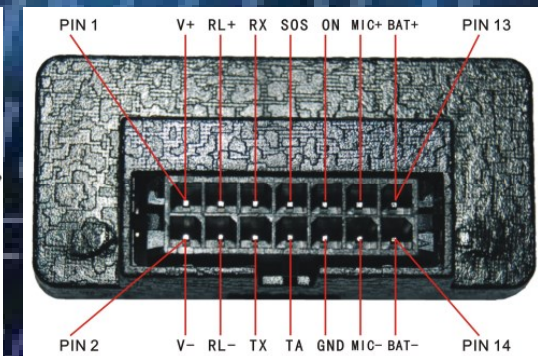
# CHRISTEL

## STARTREK

IoT Device Module

&

GPS/GSM\_GPRS & LBS SECURITY SYSTEM



Model: CST988

Model: CST288

# STARTREK



- 1. Emergency Alert Sensing.** (e.g. Public Sewage & Flood Monitoring)
- 2. Man movement Safety monitoring System.** (e.g. Fire Brigade).
- 3. Vehicle movement tracking.** (e.g. Fleet Management)
- 4. Military personal movement tracking.** (e.g. Defense)
- 5. Asset movement tracking.** (e.g. Asset Inventory Control)
- 6. Remote Data Sensing Acquisition Management.** (e.g. Data)
- 7. Geo-Fencing Management.** (e.g. National Guard Border).
- 8. Speed Monitoring & Control System.** (e.g. Ministry of Land Transport Traffic Agencies)
- 9. Building Home Automation Control.** : IoT
- 10. Medical Application.** : IoT
- 11. Smart Metering** : IoT



MAIN COMMAND ROOM



OIL REFINERY PLANT



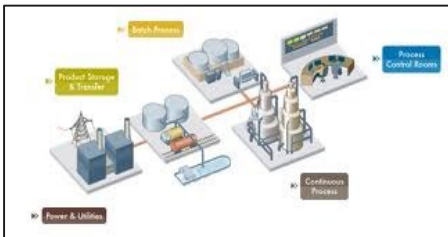
OIL REFINERY PLANT



ELECTRIC POWER SUB-STATION



NATIONAL GUARD BORDER



CITY VIDEO SURVEILLANCE



MILITARY ARMOUR VEHICLE



MILITARY PERSONNEL



POLICE PATROL FORCE



• *Military*



• *Fire fighter*



• *Tunnel and base constructor*



• *Security guard*



• *Ambulance*



• *A car of operations*



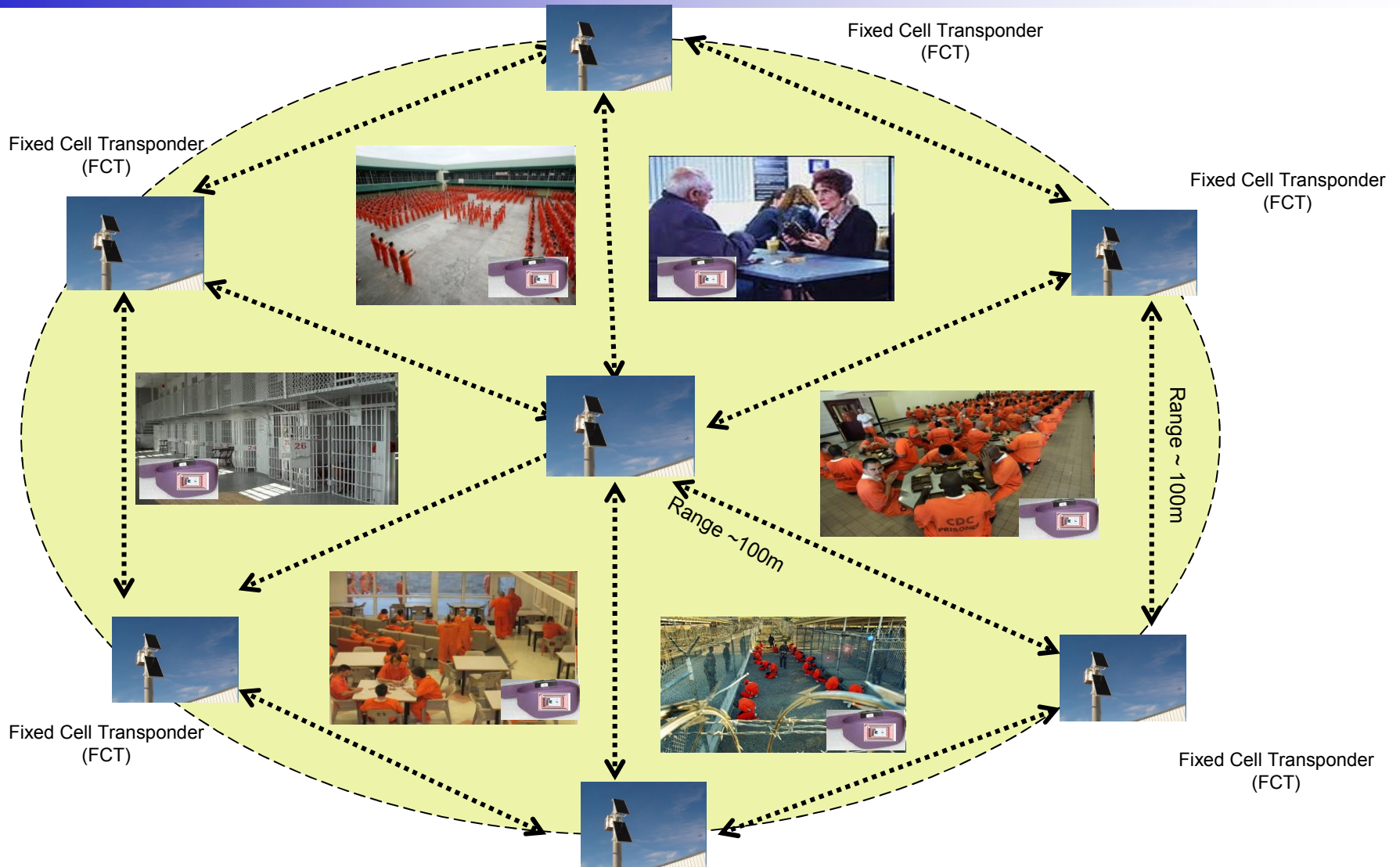
• *Vessel security*



• *Facility Control Manager*



• *The old, Kids*



CONFIDENTIAL INFORMATION

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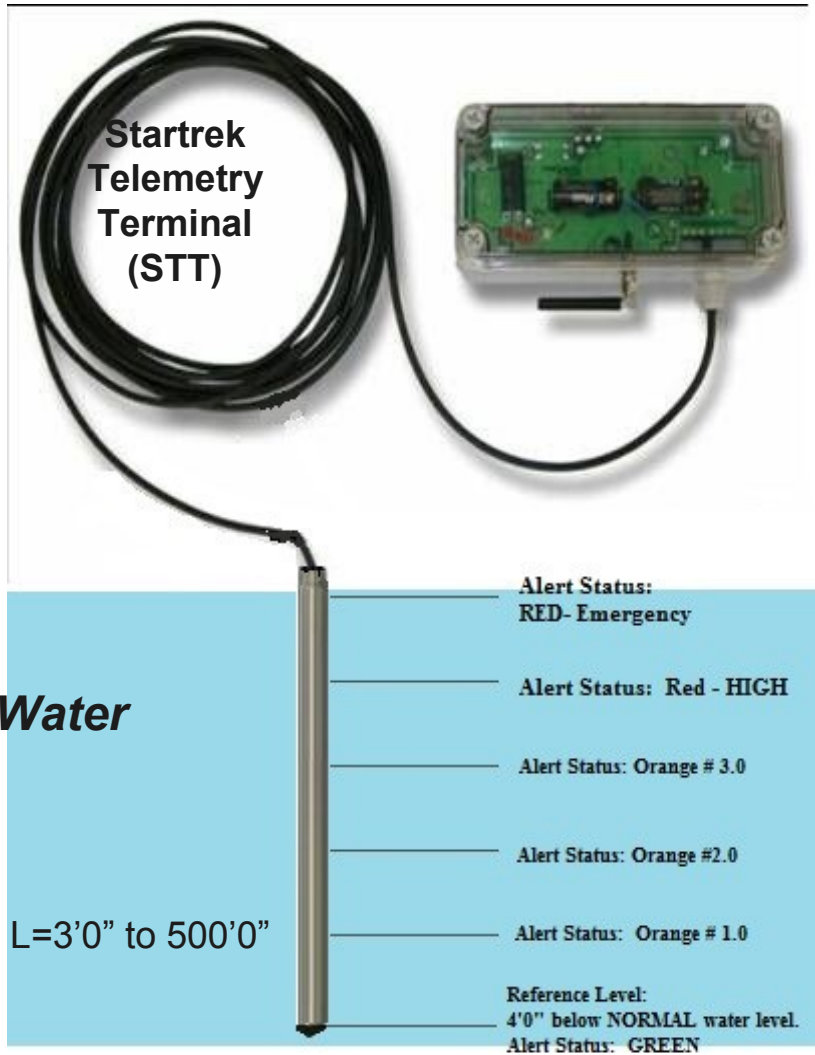
# **STARTREK**

WEB-BASE REMOTE ACCESS & CONTROL BASE STATION

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## **WIRELESS DATA COLLECTION AND DISTRIBUTION**

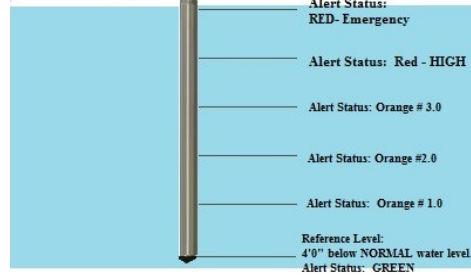




## Remote Flash-Flood-Sensing Water-Level Data Telemetry Terminal (STT)



**Startrek-Telemetry-Terminal (STT)**



**River**

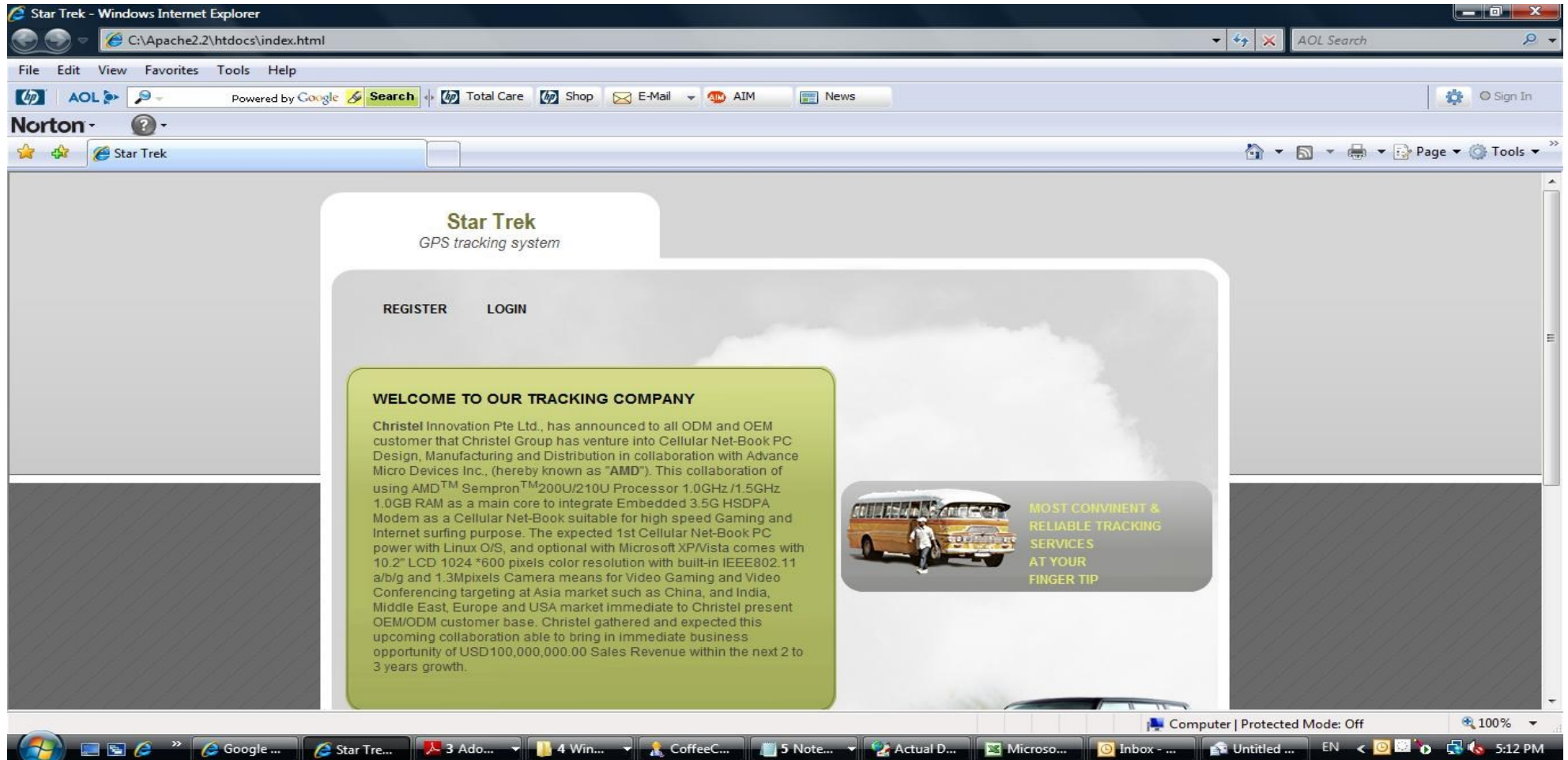


**Water Dam Flood Gate Control**





**Note: STT-channel Monitoring water level  
(Standard: 10-Channels up to 100 Channels)**



**WEB BASE System configuration page (sample): User Registration**

The screenshot shows a web-based configuration window titled "Input Box". The window has a red background and a blue title bar. It contains several input fields and control elements:

- Send List:** A text input field containing "+8613632685163," with a "Clear" button to its right.
- Mobile No:** A text input field containing "+8613632685163" and a dropdown arrow, with an "Add to Send list" button to its right.
- Counter:** A dropdown menu showing the value "2".
- Interval:** A dropdown menu showing the value "30Seconds".
- Password:** A text input field containing "xxxx".
- Checkboxes:** A vertical list of checkboxes on the right side:
  - Modify Center No.
  - Modify Password
  - Break Oil (Engine)
  - Break Circuit
  - Modify Master ID
- Buttons:** A vertical stack of buttons on the bottom right:
  - OK
  - Get last position
  - Add User
  - Cancel

### WEB BASE System configuration page (sample): Remote Commands and Controls

English Chinese

Open Save as Records Auto Read 1 Read 2 EOT

GPS Port: COM1 9600

GIS Port: COM5 9600

Tracker Type: GP2000T Series

Mobile No.:

Datetime:

Latitude:

Longitude:

Real Tracking

Received Message ADD

Send Command

Backview ClearHistory

Speed Up Speed Down

< >

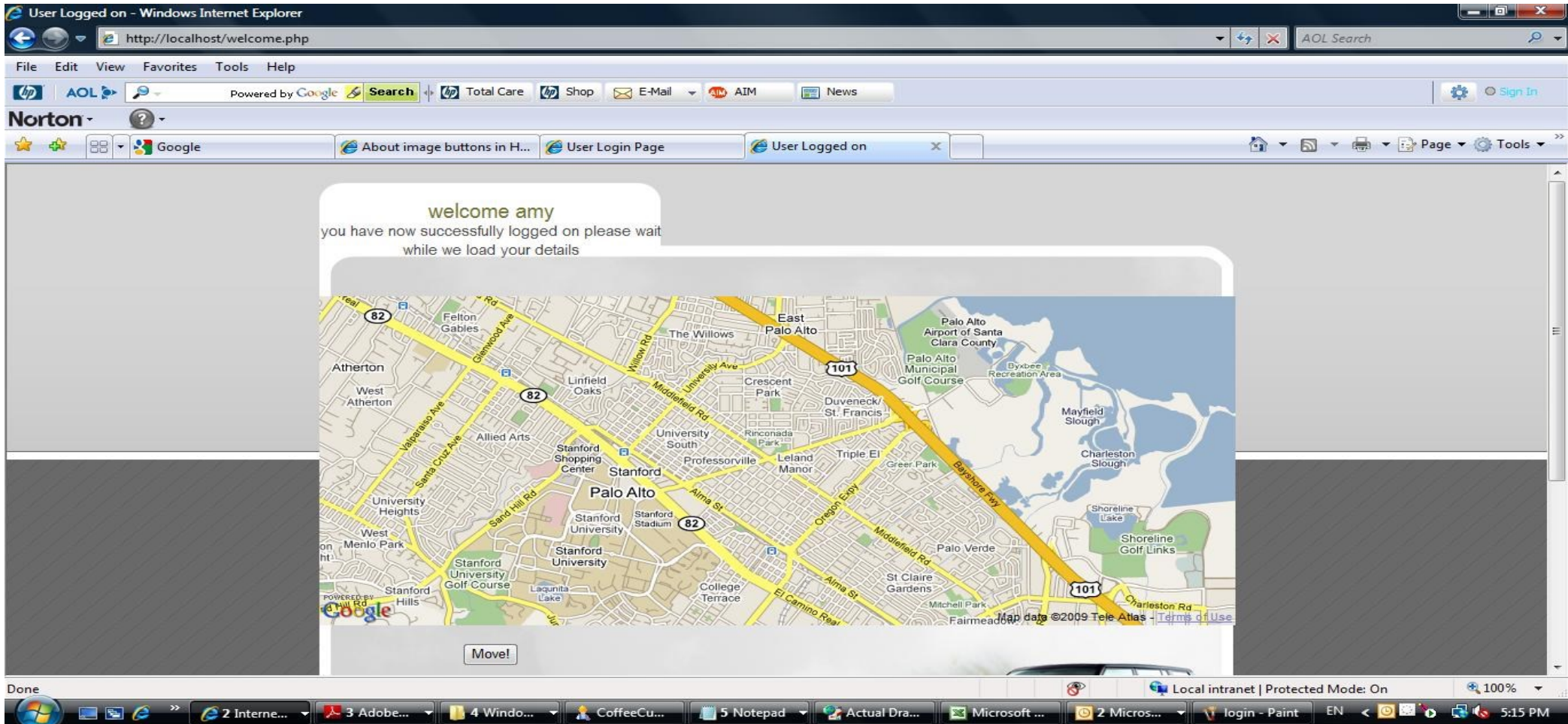
Delete pass message

View Pause

# CRY FOR HELP !

Mobile No. : 13246771504 Time: 06/03/23,00:45:29+02

WEB BASE System configuration page (sample): Monitoring field units



**WEB BASE System configuration page (sample): Vehicle or device location tracking.**

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