

Your Reliable Partner  
in  
DAB

*We Lead The Digital  
Radio Revolution*  
wireless digital audio semiconductor  
technical innovator and leader



Albert Tseng  
2018/1/11

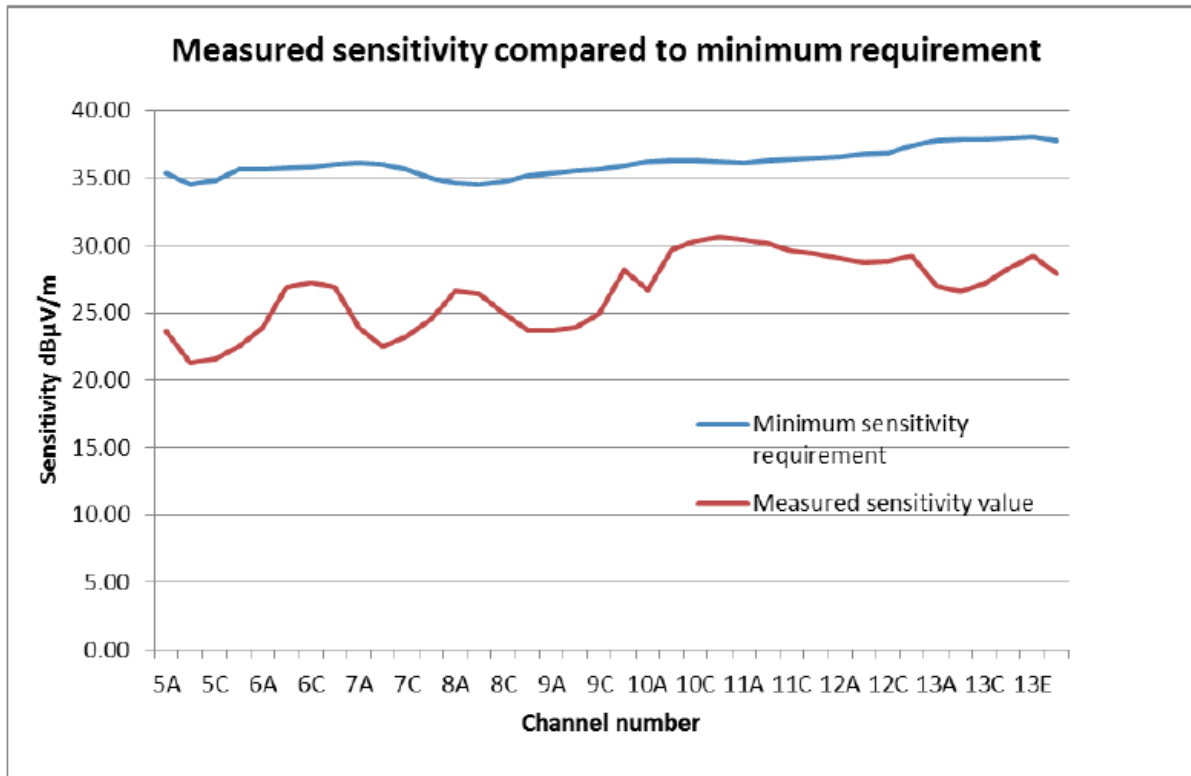
# What we provide to customers

- ⊕ Performance proven IC/modules
- ⊕ The advantage you will have with our IC/modules
  - ♥ High Sensitivity
  - ♥ Short development time
  - ♥ Efficiency of production
  - ♥ Reliability after sales
  - ♥ Good Service through out the product life

# High Sensitivity



✚ Tick Mark approved with High Marging



Graph of measured minimum sensitivity against tick mark requirements

Model:T4B

Tick Mark Report  
by DTG, report  
DAB-8314

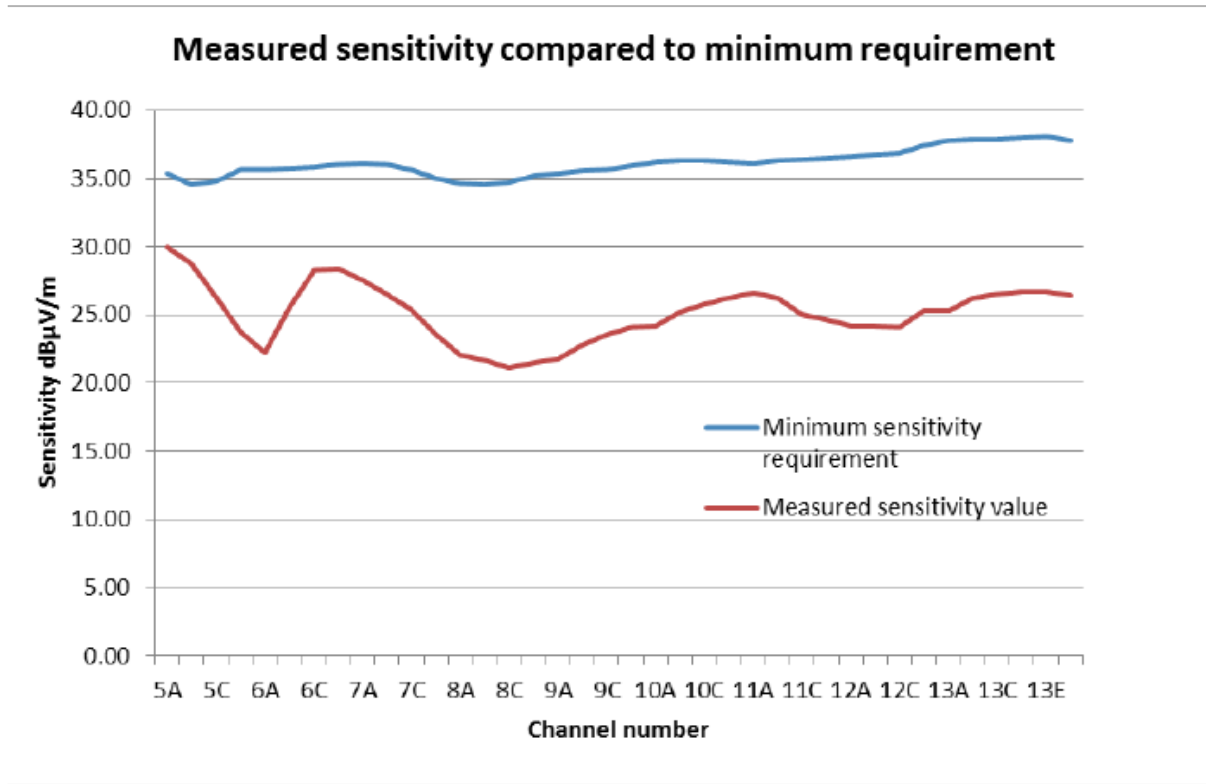


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# High Sensitivity



✚ Tick Mark approved with High Marging



Graph of measured minimum sensitivity against tick mark requirements

Model:T4E

Tick Mark Report  
by DTG, report  
DAB-8315



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# Short development time

✚ We accumulated ample experience help customers developing products, in the following pages are listed a few for reference, so

- ♥ A lot of templates for you to choose
- ♥ Variety of problems in different area have been solved thus avoided in your product
- ♥ Time to market

# Efficiency of production

## ✦ Cost effective test equipment

♥ KeyStone supply the most cost effective signal generator, SABRE®

## ✦ Code change

♥ KS module support CUVBROS® which allows program code be upgraded by broadcasting

## ✦ Automatic Test

♥ KS module can be controlled by DATES® to conduct automatic test

# Reliability after sales

✦ Reliability comes from discipline

- ♥ All modules went through a well-defined rigorous testing procedure
- ♥ All test results are well-documented in a database
- ♥ Each module has a unique S/N with which all its testing record can be retrieved to know its healthiness

# Many Customers Prove it





# Good Service

## ✚ Before Design

- ♥ Guide line is provided to help engineers handle tricky RF issue
- ♥ Training is provided for design and test to ensure good quality


## ✚ During Design

- ♥ We provide Consultant and Review to schematics and layout

# Good Service

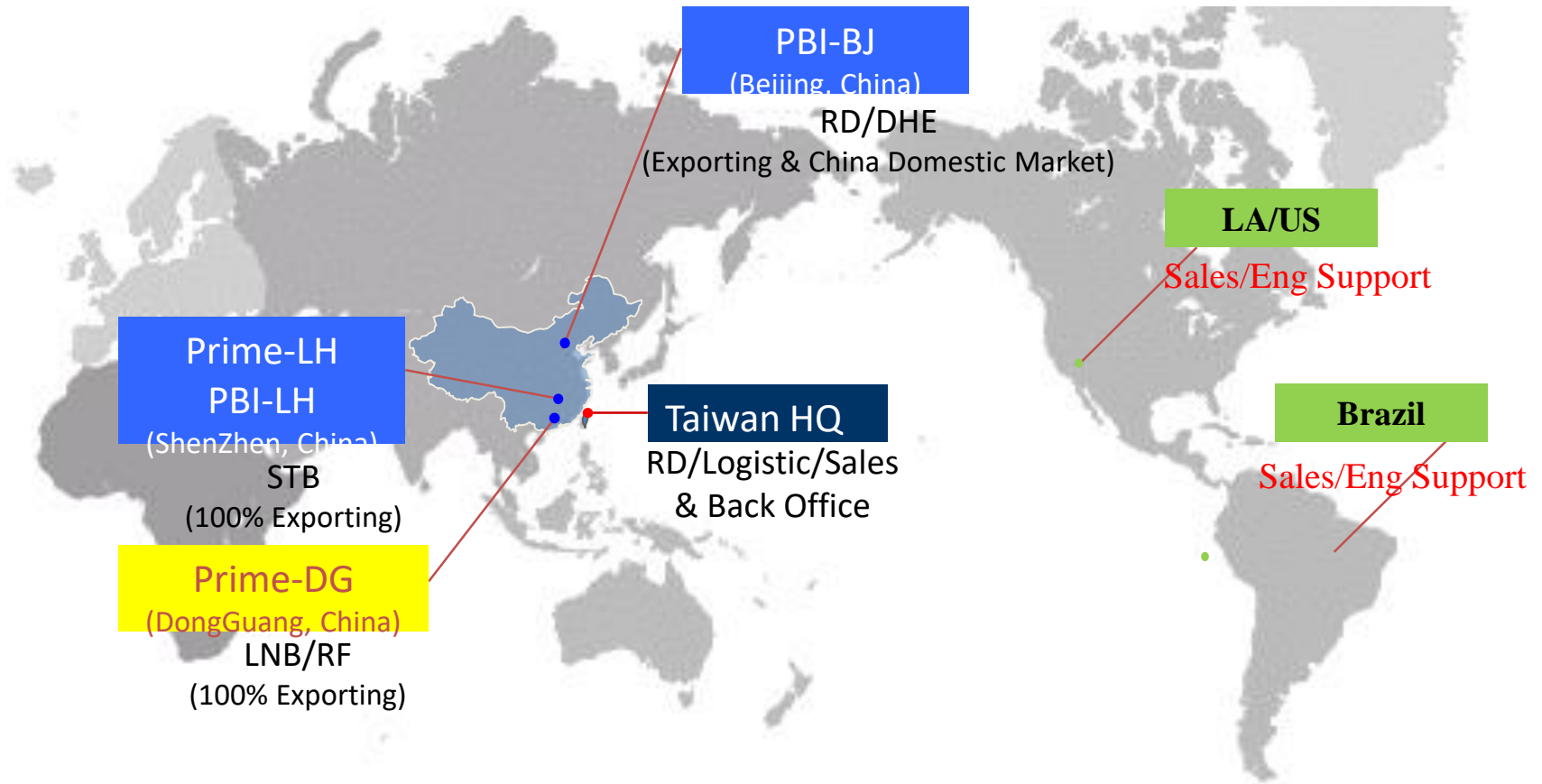
- ✦ SABRE helps designer to do thorough test
- ✦ DATES make the test procedure completely automatic
- ✦ We have a well-equipped lab to give customer product a final test to make sure it is qualified for shipping

# Some facts about us

- ✦ Company : Fabless IC/module design house,
- ✦ Established time : March, 2009
- ✦ Subsidiary of Prime  Prime  
百一電子
- ✦ Registered capital : 6.6 M in USD
- ✦ Headquarter : Science-Based Industrial Park , Hsinchu, Taiwan
- ✦ Branch office : ShenZhen, China
- ✦ Employee : 35 people



# Group Affiliates Locations



# Roadmap

## 0.11 um process

Automotive Solution

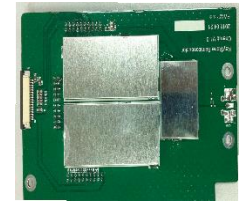


### Cherub :

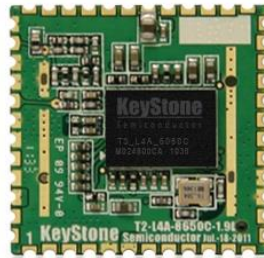
- DIY automotive solution
- Diversity Enhanced Performance
- Good Service Following

### T3:FM/DAB/DAB+/DMB-R

- Meet UK's new automotive ACS requirements,
- Super low-power at 120 mW,
- Better FM RDS/TMC reception.



## 0.13 um process



### T1/T2:FM/DAB/DAB+/DMB-R

- Offer SLS/EPG/DLS+/TPEG features
- True single-chip in 1.1 cm x 0.8 cm,
- Lowest power and smallest form factor,
- Commercial and industry-grade modules,
- Embedded in mobiles, TVs, STBs, etc.
- Lowest power at 180 mW.

## 0.18 um process



### FM/DAB

- 4-chip modules
- Smallest module size and lowest power in 2009

2004 ~ 2009

2010

2012

2013

2016



# Roadmap



Oceanus

**Feature :**

- DAB+/DAB/FM/RDS
- Enhanced Multi-channel Data Service
- Cost Effective Color Display



T4

**Feature :**

- DAB+/DAB/FM/RDS
- Enhanced Multi-channel Data Service
- Support Cost Effective Color Display

Mayim

**Feature :**

- Monolithic DAB+/DAB/FM/RDS
  - Enhanced Multi-channel Data Service
  - Cost Effective single chip solution
- Specially designed for Car solution,  
Mobile phone, Tablet or PC

2016

2017

2018



# Kitchen Radio



Philips AE5020



Sangean DPR-16C



Geneva Lab model M



Philips BTB 2465



Geneva Lab model S



Geneva Lab model XS



Geneva Lab World Radio DAB+

# Mini/Micro (con' t)



Pioneer CM31



Pioneer X-HM31DAB-K



Pioneer HM11



Pioneer X-HM51DAB-K



Pioneer HM21



Pioneer SMC00



# Mini/Micro (con' t)



SonoroCD



SonoroHiFi Audio



Sonoro



SonoroHiFi Audio

# Mini/Micro (con't)



JVC UX-D750



JVC UX-D100



JVC UX-D150



NEON 1536D

# Internet Radio with DAB(Con' )



Telestar DABMAN i200

[https://www.telestar.de/de\\_DE/DABMAN-i200/352-9266-10619/](https://www.telestar.de/de_DE/DABMAN-i200/352-9266-10619/)



Telestar DABMAN i200 CD

[https://www.telestar.de/de\\_DE/DABMAN-i200-CD/352-9266-11234/](https://www.telestar.de/de_DE/DABMAN-i200-CD/352-9266-11234/)

# Kitchen Radio (con' t)



International Receiver Company (IRC) in Denmark



Dual in Switzerland



Digital Broadcasting Company (DBC) in HK



Wintal in Australia



Telefunken in Germany



TTMicro in Norway



Ennovia in Denmark

# Kitchen Radio (con' t)



Tevion (ALDI) in Germany



Soundmaster in Germany



Soundmaster MCB800D



GPO Retro

THOMSON



Thomson Australia



# Kitchen Radio (con' t)



AEG



ViewQuest in UK



Albrecht DR881 in Germany



Dared in Europe



End customer: DBC in HK



AKAI Retro



TTMicro in Norway, IRC in Denmark, AGK in Denmark

## DAB Iphone docking (con't)



Nakamichi in Australia

## DAB HiFi Tuner



Dared in Europe

## Iphone DAB Dongle



Lingo in UK

## Iphone Battery Pack + DAB



Lingo in UK

## CD Micro



Brand: United and Sailor in Switzerland

# Car Adaptor (con't)



Brand: HiTV in Australia



Connects2 in UK



Avisio (Pearl) DAB+ adaptor in Germany



Zenec in Switzerland



Connects2 in UK



# In Car Stereo

✦ Connects2 in UK



# Photo Album

✦ Manufacturer: Usmart

✦ Brand: Usmart in HK and OEM (Lenoxx in Australia)

✦ MP: Aug, 2011



# Set-top box

✦ Eight in HK



# LED TV

✚ Telefunken



# Handheld Radio (con't)



Usmart in HK



BT-Link in HK



Dual in Germany



Thomson in Australia



Ideal Radio in HK

# Handheld Radio (con' t)



Technisat in Germany



Pearl in Germany



Thomson Australia



Stilus (Sailor) in Germany



Lingo in UK / HK / Czech Republic



DBC HK



# Mobile Phone

- † Manufacturer: ARS
- † Brand: Macostar in HK
- † MP: Aug, 2011



# Bluetooth DAB headset

† Lingo







**KeyStone**  
semiconductor

Your reliable partner in DAB solutions  
Ask more with [contact@keystonesemi.com](mailto:contact@keystonesemi.com)  
See more at [www.keystonesemi.com](http://www.keystonesemi.com)

In God we trust

謝謝！

