

Company Data

BECKER
Electronics Taiwan

Electronics and Avionics - Development and Production

Becker Electronics Taiwan Ltd.

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Taiwan ROC

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Timezone UTC+8



Company home with 1200m² area

Privately owned company, founded 1973 as manufacturing plant for
Becker Autoradiowerk.

The famous Becker car radios were manufactured here before that brand was sold.

Total Number of Employees: 12
Number with at least B.Sc. degree: 9
QM System: ISO 9001:2008

Quality Management System

- ISO 9002 since 1998
- ISO 9001:2008 since 2008
- Long standing experience in avionics manufacturing and development
- Certified as supplier for manufacturing and R&D by:

Panasonic Avionics Corporation (PAC), IFE (In Flight Entertainment)



Holmberg GmbH & Co. KG, Berlin, Germany, crew handset modules



Becker Avionics Germany, radio communication, intercom, navigation

- CSIST development partner
- Certification as EASA design, production and maintenance organization in progress

Quality is not an add-on, it is an integral part of all processes

ANWS Air Navigation and Weather Services of Civilian Aviation Authority –Taiwan

- AWOS (Automatic Weather Observation System) in major Taiwan airports: Taoyuan (Taipeh) International, Kau Hsiung, Taitung, King Moon
- Communication transmitter / receiver / transceiver system sales and maintenance and servicing
- ADS-B out in airport ground base (Taoyuan international airport) for airport traffic control

CSIST Chung San Institute of Science and Technology

- Running the Avionics R&D center (funding from MOEA). Cooperation in R&D for development of civilian avionics from military technology. Technology transfer and adaptation from military to civilian markets and standards.
- Participate as a partner for the projects of CSIST

CWB Central Weather Bureau

- Weather broadcasting station for fishery

III (Institute for Information Industrial)

- Software cooperation in avionics software system product

Links to

- ITRI (Industrial Technology Research Institute)
- Weather system center - air force
- Air-police
- Army aviation branch
- National fire and rescue branch
- Coast guard

Research and Development

- System concept
- Requirements definition
- Mechanical design (2D and 3D CAD)
- Electronic design, schematics and layout. Design for EMI/EMC from the start.
- Software design
- Prototype manufacturing

Qualification and Certification

- Environmental testing (Temperature, EMI, EMC, ESD, Shock/Vibration) to DO-160, MIL-810 or EN90945

Production

- PCB assembly (automatic P&P with local partners, manual assembly in house)
- Tooling and casting (metal and plastic) with local partners
- Painting, printing and Laser engraving with local partners
- Supply chain management
- Manual finishing
- Final assembly and QA testing of finished products
- Quality control to avionic standards with all reports

Genuine BETL Products

Developed and manufactured in house

- System concept
- Requirements definition
- Mechanical design
- Electronic design (schematics and layout)
- Software design
- Prototype manufacturing
- Environmental testing (Temperature, EMI, EMC, Shock/Vibration) to DO-160, MIL-810 or EN90945
- Series manufacturing

Recent Examples



AirScout-Mission

Moving-map and mission-system for helicopters



AMT104

Cockpit-Touch-Monitor

Activities and Services

Customer Products

Products developed and manufactured to customer specs

Depending on the customer we do all or only parts of:

- System concept
- Requirements definition
- Mechanical design
- Electronic design (schematics and layout)
- Software design
- Prototype manufacturing
- Environmental testing (Temperature, EMI, EMC, Shock/Vibration) to DO-160, MIL-810 or EN90945
- Series manufacturing
- Supply chain management
- QA testing



PCB, mechanical and unit prototypes



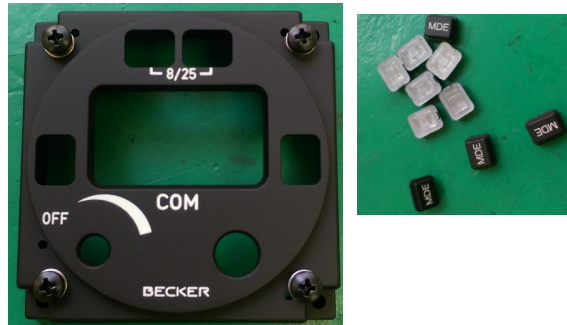
Electronic modules and fully assembled units



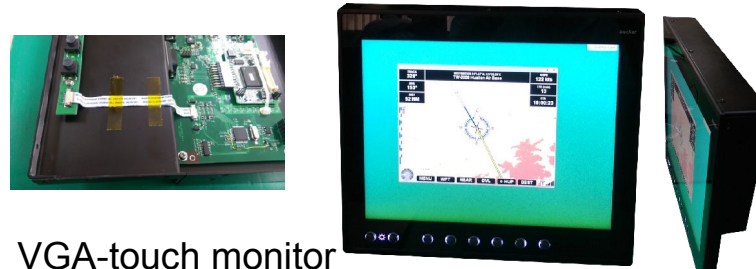
(Semi-) automatic QA testing

- Front panel with display, buttons, knobs, with optional backlight
- Sun light readable displays with wide dimming range for night operation
- Displays with PCAP touch, optically bonded, with interfaces to your requirements
- NVG/NVIS compatible panels and displays
- Controller and CPU boards
- All standard interfaces (i.e. RS232, USB, CAN, ARINC-429, etc)
- EMC/EMI compatible design, certifiable to ce, UL, DO-160, MIL-810, EN90945, etc
- Thermal management (passive and active cooling, heating)
- Software design to DO-178
- Mechanical design, tool design for plastic and metal casting
- Experience in design and manufacturing to high standards for avionics and military
- Design from the beginning for
 - certifiability
 - testability
 - manufacturing

Examples



Control head and backlit buttons
Injection molded, two layer painting
laser engraving



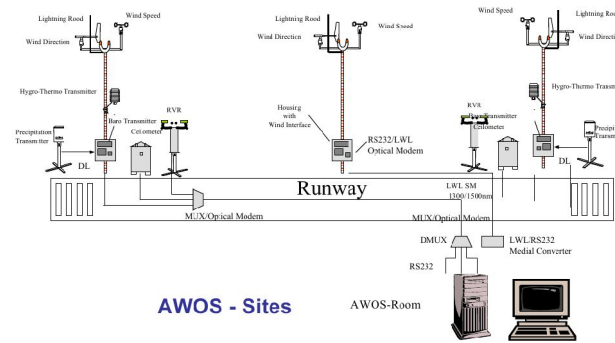
VGA-touch monitor
Wide temperature range, sunlight readable



AirScout-Mission
Electronics, mechanical and
software-design



Case study for 160mm control unit
Tooling for injection molding,
backlit HMI elements, TFT integration



Automatic Weather Observation System
Full system design



Schematic design and layout



Prototype ARINC-429 to USB interface
Electronics and software design



Control unit
with 2.5 inch TFT



Mechanical 3D-CAD design