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GEMALTO M2M

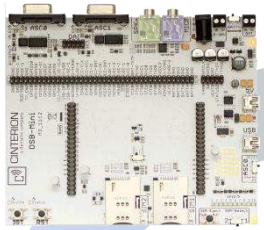
Accessories Overview

Product Marketing

Sep 2015

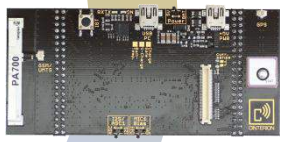
Developing with Cinterion Wireless Modules is easier than ever!

DSB-mini
The cost-effective DSB75 alternative



DSB75
Fully-fledged development board

Adapter Boards
Combines with the module of your choice



Starter Kits
Developing within minutes

Evaluation Boards
Cinterion SMT modules available on B2B format

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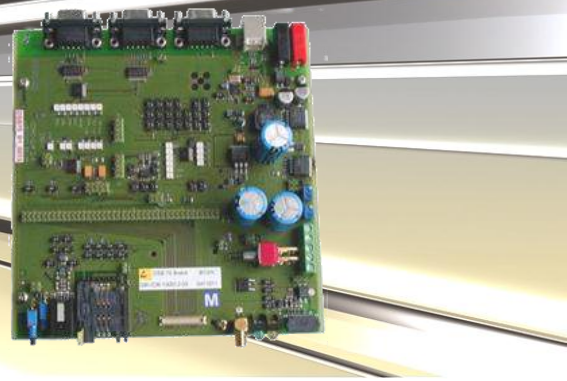


DSB75

All-round development board

DSB75 is designed to support system integrators in developing and evaluating products based on Cinterion Wireless Modules. The DSB75 is compatible with all DSB-Adapter boards and the Multi-Adapter R1.

- USB
- 3x Serial Ports
- I2C and SPI
- Digital and Analog Audio
- SD Card Interface
- SIM Interface (1.8/3.0V)
- Antenna Interface
- 10x GPIOs accessible from pin header
- ADC and DAC
- 23x LED indicator for control, RS232 and GPIO
- All module signals accessible

DSB75

Development Support Board with extensive feature set

Part#: **L36880-N8811-A100**

Package Contents

- 1 DSB75 Development Support Board
- 1 MiniMag antenna (850 MHz – 1990 MHz)
- RF adapter cable 150mm (Hirose – Hirose)

INTERFACES

- USB
- 3x RS232 (data, control and debug)
- I^2C (supports 3V or 5V devices)
- SPI
- Digital audio interface (DAI)
- 2x analog audio interface
- SD Card interface
- SIM Interface (1.8/3.0V)
- GPIO
- 2x ADC inputs + 1x DAC output
- 23x LEDs indicators for control, RS232 and GPIO

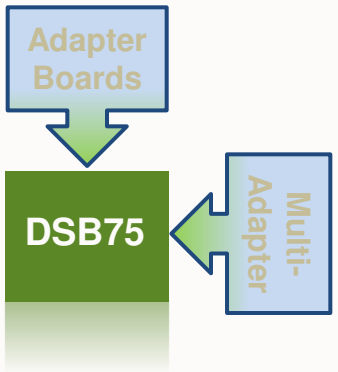
DIMENSIONS

- 177 x 160 mm

ADDITIONAL FEATURES

- Analog audio interfaces supports microphone supply for handset, headset and speakerphone operation
- Connected EEPROM (128kbit) with adjustable addresses
- 10x GPIOs accessible at pin header
- Various power supply options: Battery or Laboratory PSU (9-15V)

COMPATIBILITY



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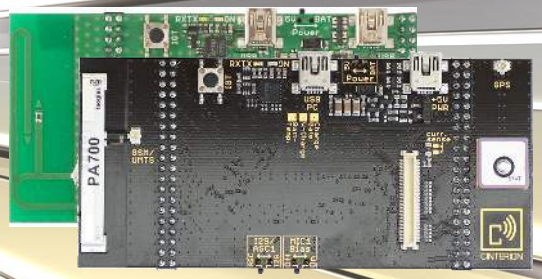


Starter Kit

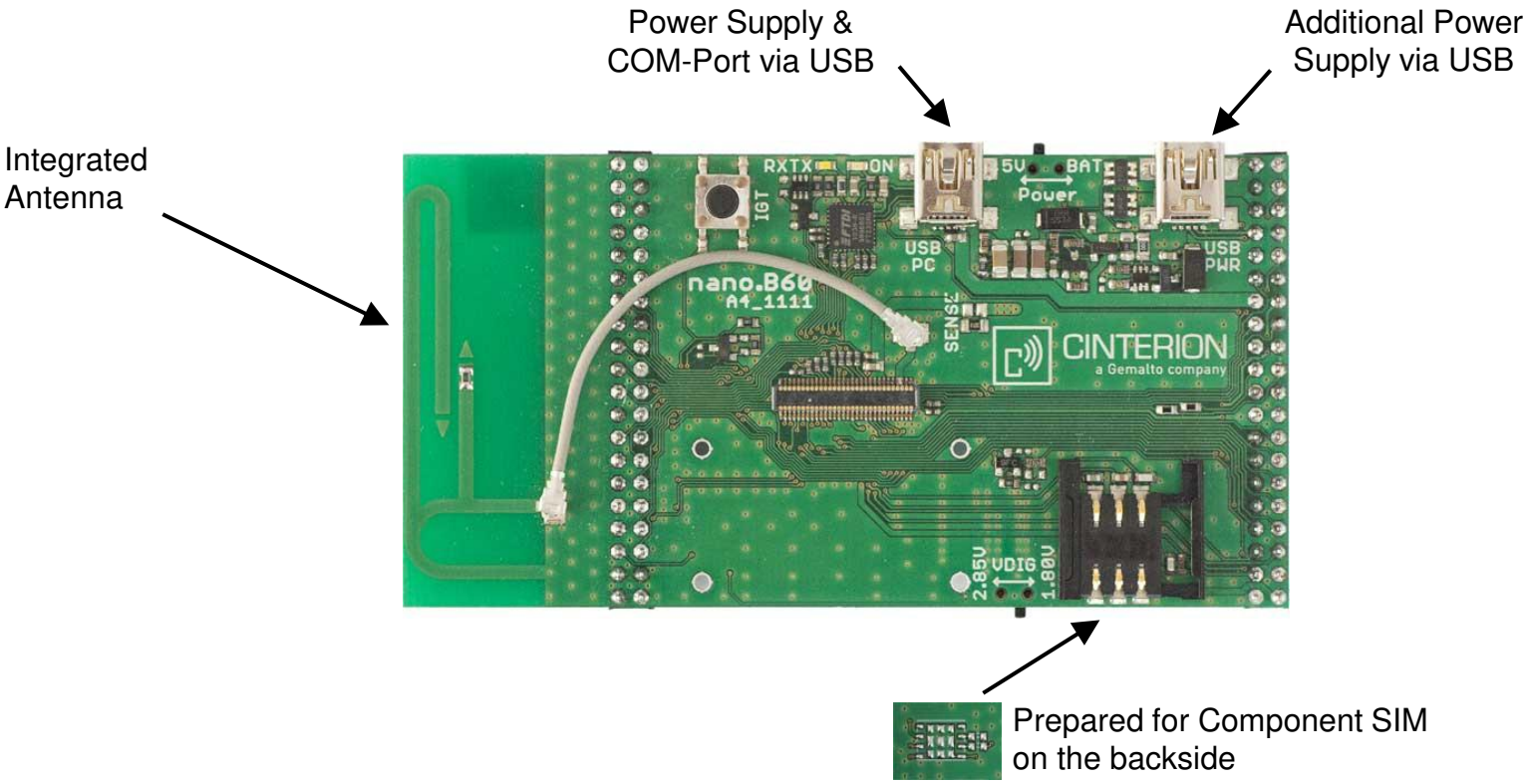
A perfect way to kick off your design

Simple environment which allows you to start developing within a few minutes. Includes on-board antennas. Compatible with most 80/60-pin B2B modules and evaluation boards.

- Compatible with 80/60-pin Modules and Evaluation Boards
- Fits on DSB-mini
- USB connector
- On-board LEDs
- SIM card holder
- Power supply through USB or DSB
- Prepared for component SIM
- On-board septa-band cellular antenna (SK-B80)
- On-board GPS antenna (SK-B80)

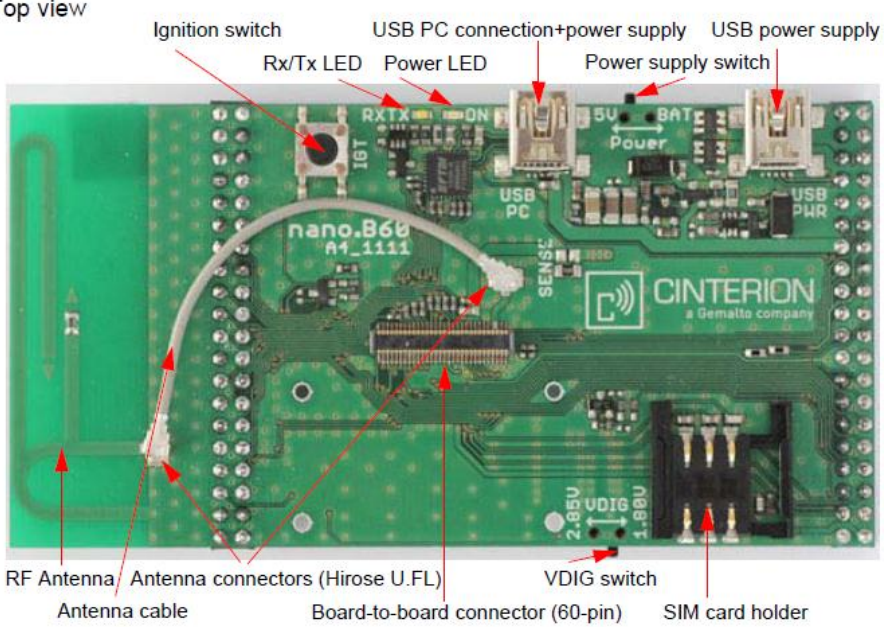
Starter Kit B60 L30960-N0020-A100

- Start operation right away without the need of additional equipment.
- Easy handling, like a Terminal without housing.
- Compatible with BG2 and BGS2 Rel1 EVAL
- SIM, COM, Power and Antenna on board.



Starter Kit B60 L30960-N0020-A100

Top view



Bottom view

Prepared for Component SIM on the backside

Starter Kit B80 L30960-N0040-A100

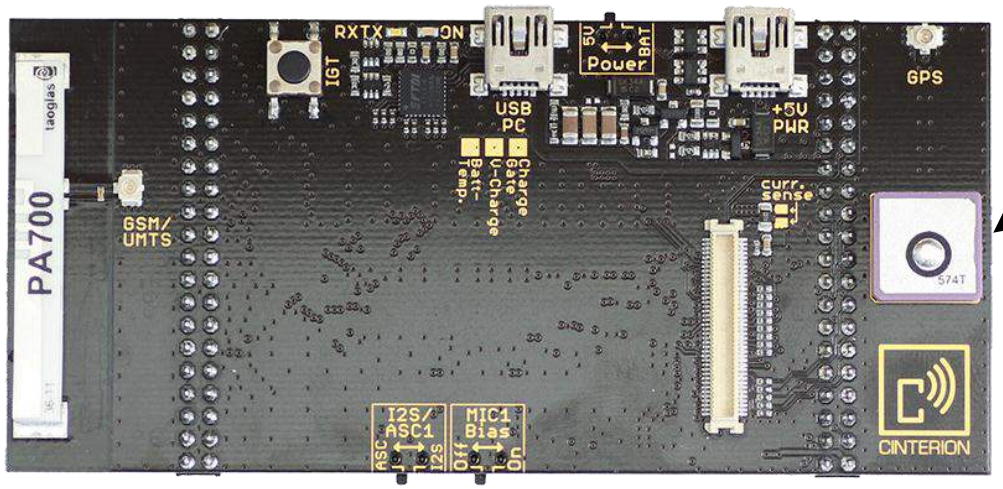
- Start operation right away without the need of additional equipment
- Easy handling, like a Terminal without housing
- Compatible with 80-pin B2B Cinterion modules and 80-pin evaluation modules
- SIM, USB, COM and high efficiency antennas (septa-band cellular and GPS) on board

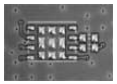
Power Supply & COM-Port via USB

Additional Power Supply and USB port

Integrated Septa-band Cellular Antenna

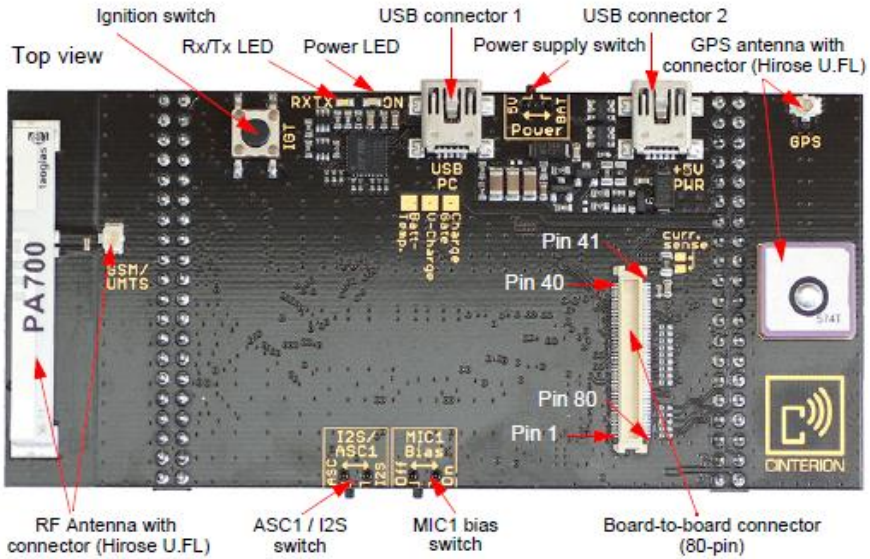
Integrated GPS Antenna

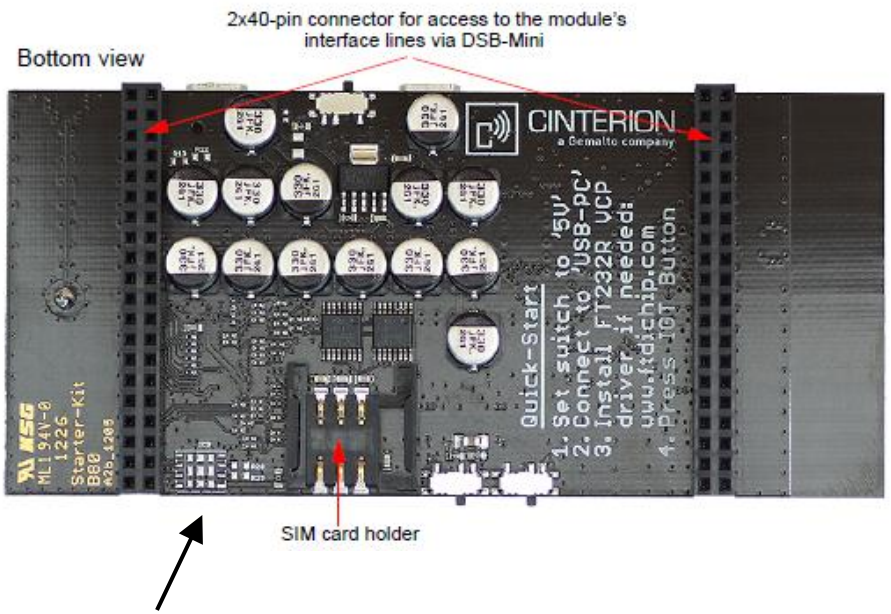




Prepared for Component SIM on the backside

Starter Kit B80 L30960-N0040-A100

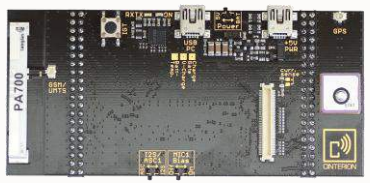




Prepared for Component SIM on the backside

Starter Kit B60/B80

Kick off your application design within minutes



Part#: **L30960-N0040-A100 (SK-B80)**
Part#: **L30960-N0020-A100 (SK-B60)**

Package Contents

- 1 Starter Kit B60/B80
- 1 mini-USB Y-cable (1m)
- 1 Hirose antenna cable 60mm (50 Ohm)
- 1 Hirose antenna cable 100mm (50 Ohm)

INTERFACES

- 2x40 header to DSB-mini
- Status LEDs (TX, RX)
- U.FL antenna connector for an optional external antenna
- 2x Mini-USB connector (ASC0, USB)
- SIM card holder
- Prepared for component SIM

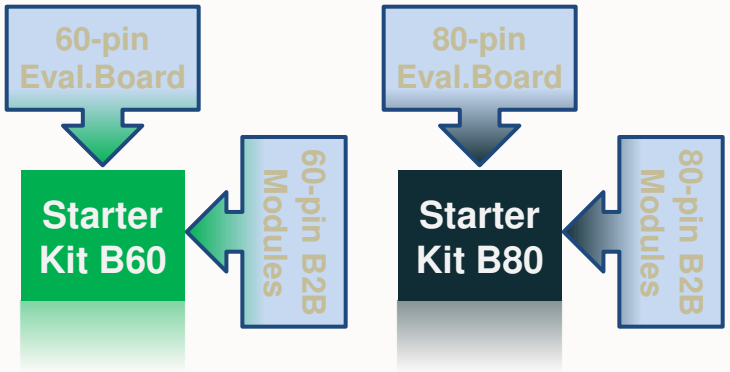
DIMENSIONS

- 100 x 50 mm (SK-B60)
- 110 x 50 mm (SK-B80)

ADDITIONAL FEATURES

- Easy handling, like a Terminal without housing
- High efficiency antennas (septa-band cellular and GPS) on board
- Test-points on board
- Various power supply options: USB 5V or supply via DSB-mini

COMPATIBILITY



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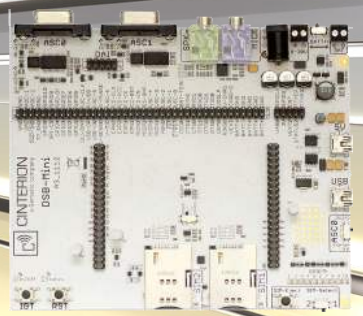

DSB-mini

Cost-optimized development board

DSB-mini is the alternative to DSB75 including two USB ports, dual SIM support and pads for a component SIM. The DSB-mini is compatible with all DSB-Adapter boards, the Multi-Adapter R1 and all Starter Kits.

- 2x RS232
- USB
- Audio connector for conventional headsets
- Power supply through USB, 8-30 V or battery
- Dual SIM interface
- DAI interface
- Prepared for component SIM
- LED indicator for control, RS232 and GPIO
- All module signals accessible
- Automatic driver level adjustment

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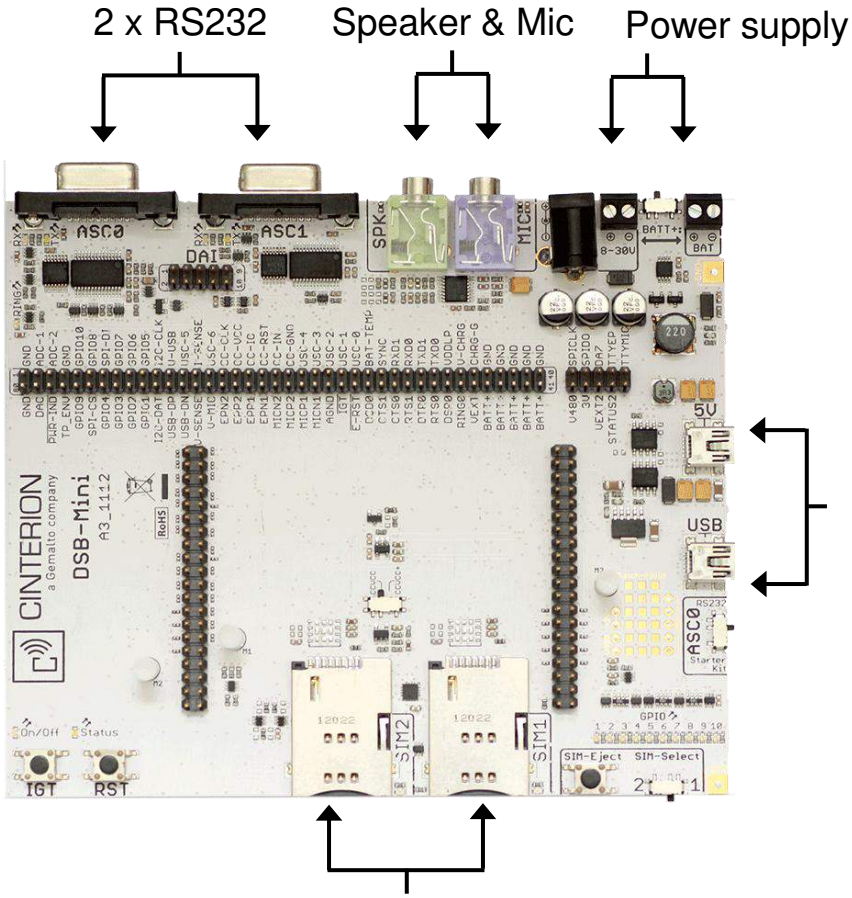
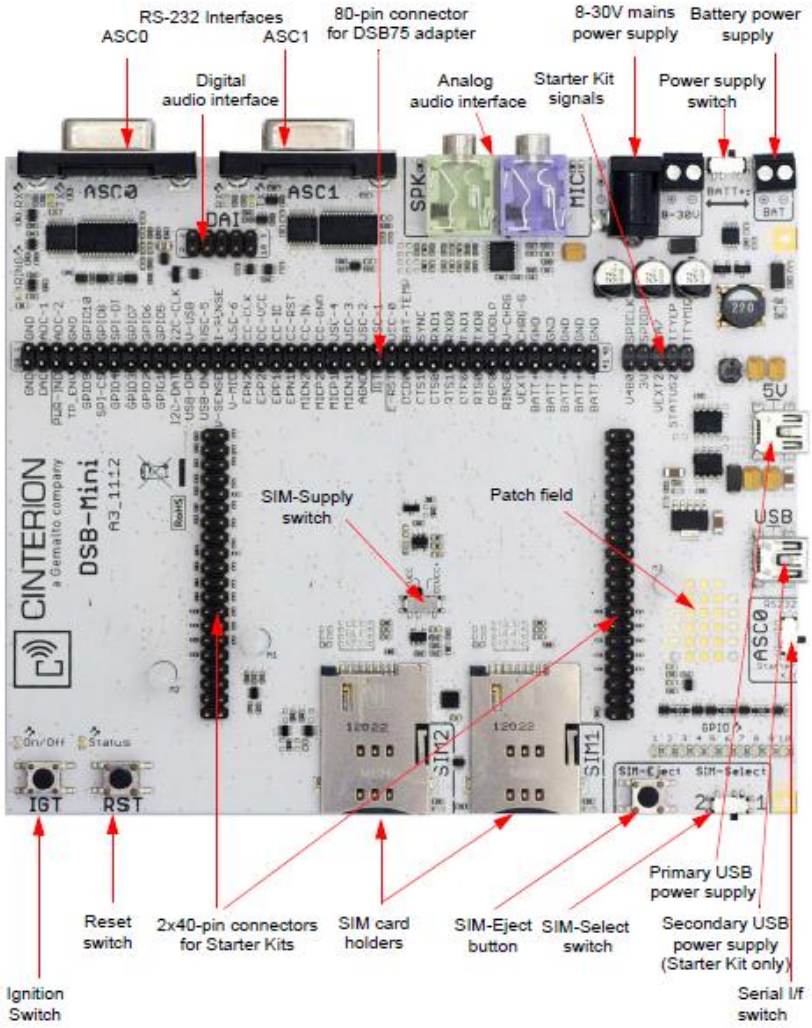
DSB-mini L30960-N0030-A100

- Compatible with DSB-Adapter boards, Multi-Adapter R1 and Starter-Kits.
- Easy to use customer oriented development board.



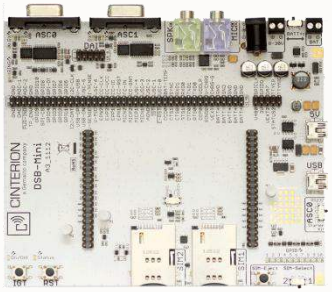
- 2x RS232 (ASC0+1) and USB
- Audio connector (MIC + SPK) for conventional PC head sets
- 3 power sources, USB, 8-30V or battery
- Dual SIM solution on board
- DAI interface accessible
- Prepared for dual Component SIM
- LED indicator for control, RS232 and GPIO
- All module signals accessible, automatic driver level adjustment

DSB-mini L30960-N0030-A100



DSB-mini

Cost-optimized to fit all your development needs



Part#: **L30960-N0030-A100**

Package Contents

- 1 DSB-mini Development Support Board

INTERFACES

- 2x USB
- 2x RS232 (ASC0, ASC1)
- I²C (supports 3V or 5V devices)
- SPI
- Digital audio interface (DAI)
- 3.5mm jack socket
- Dual SIM Interface (1.8/3.0V)
- GPIO
- 2x ADC inputs
- 1x DAC output
- LEDs indicators for control, RS232 and GPIO

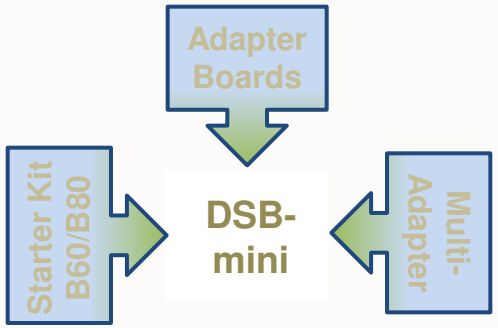
DIMENSIONS

- 140 x 125 mm

ADDITIONAL FEATURES

- Manual or SW-controlled dual SIM
- Prepared for component SIM
- 3.5mm jack for PC headsets
- All module signals accessible
- Automatic driver level adjustment
- Various power supply options: 2xUSB 5V, Battery or Laboratory PSU (8-30V)

COMPATIBILITY



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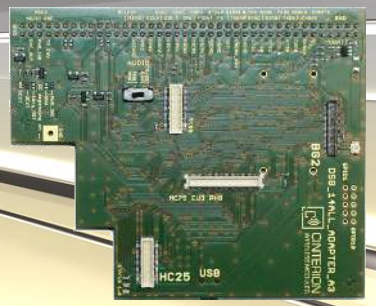


Multi-Adapter

The one-fits-all solution

This adapter allows you to connect most Cinterion B2B modules and evaluation boards to the DSB75 and DSB-mini.

- 2x40 pin header compatible with DSB75 and DSB-mini
- Pins for GPIO header
- USB on board
- Audio on DSB
- SIM on DSB
- RF on DSB
- Supports most modules and evaluation boards
- Prepared for supply current measurements

Multi-Adapter R1 L30960-N0010-A100

Supported modules

- BG2, BGS2-EVAL
- MC55, MC55i, MC55i R.1.3
- MC75, MC75i family
- BGS3, EES3, … (EVAL)
- HC25, EU3, PH8
- EHS5, EHS8 (EVAL)

Interfaces and facilities

- DSB75, DSB-Mini
- GPIO‘s
- USB on board
- Audio on DSB
- SIM on DSB
- RF on DSB

Multi-Adapter R1

Multi-talented adapter board for DSB75 and DSB-mini

Part #:

- **L30960-N0010-A100**

Package Contents:

- **1 Multi-Adapter R1**

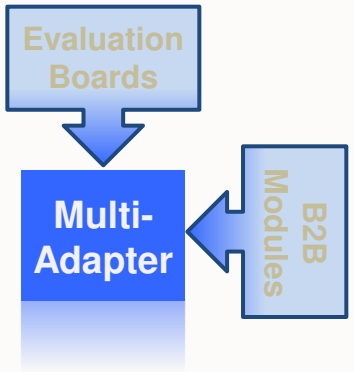
INTERFACES

- 2x40 header to DSB75 and DSB-mini
- 50-pin B2B for MC55i and MC55i-W
- 50-pin B2B for HC25/28/28-J
- 60-pin B2B for BG2-E, BG2-W, and BGS2 Rel.1 evaluation modules
- 80-pin B2B for PH8, EU3, MC75i, TC65i, TC65i-X, TC63i and all 80-pin evaluation modules (except Automotive class modules)
- External supply voltage indication LED
- Status LED
- GPIO interface
- U.FL antenna connector for BG2-E/-W
- USB Mini-B

ADDITIONAL FEATURES

- Audio switch selects microphone bias voltage for 80-pin connector
- Test-points on board

COMPATIBILITY



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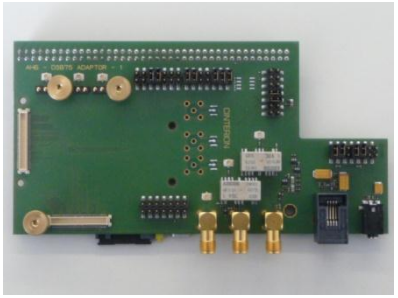
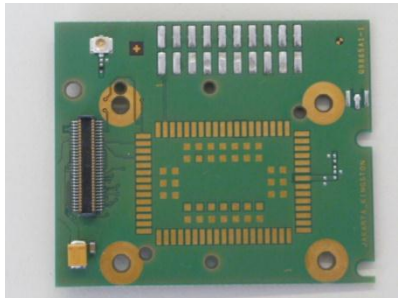
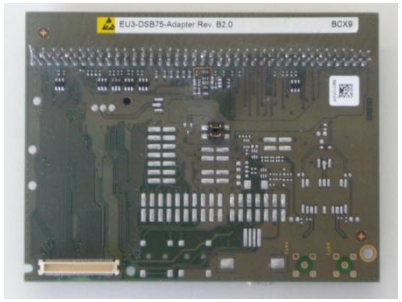
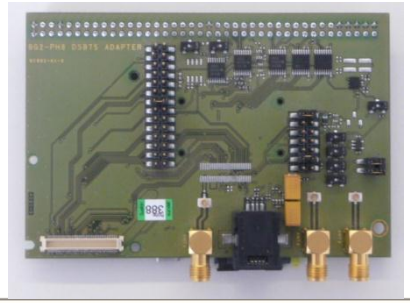
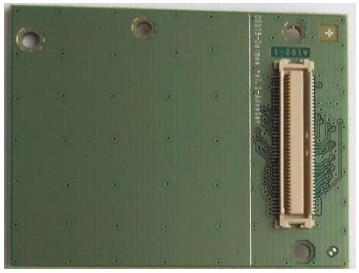
Adapter Board AH3/AH6	**L30960-N2301-A100**	
Adapter 60/80 PIN	**L30960-N2502-A100 (EOL)**	
Adapter Board EU3	**L30960-N1701-A100 (EOL)**	
Adapter Board PH8	**L30960-N1701-A100 (EOL)**	

Adapter Board MC55i L30960-N1202-A100 (EOL)



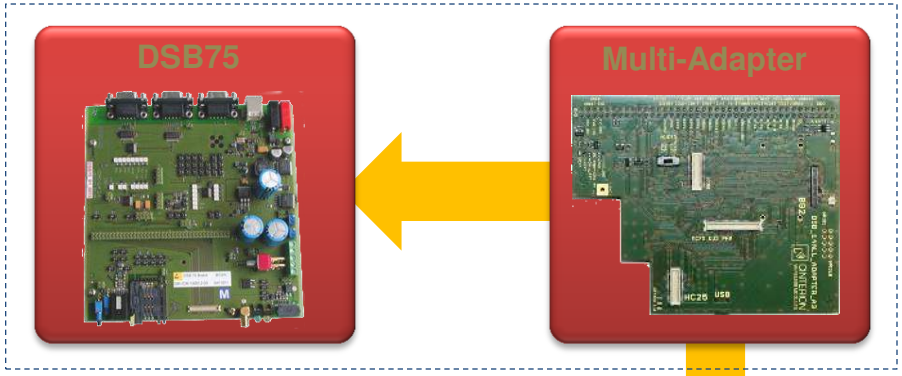
Adapter Board HC25 L30960-N1001-A100 (EOL)

Update required

Flex Cable AC65/75 L36880-N8301-A108 (EOL)

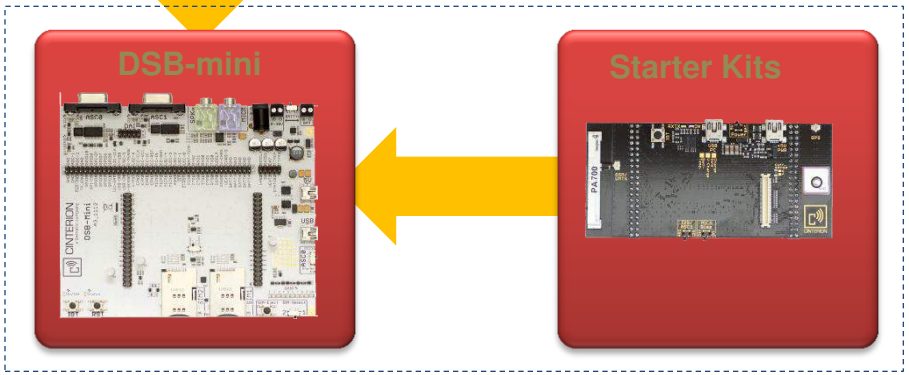
Connectivity options

Broadest function scope



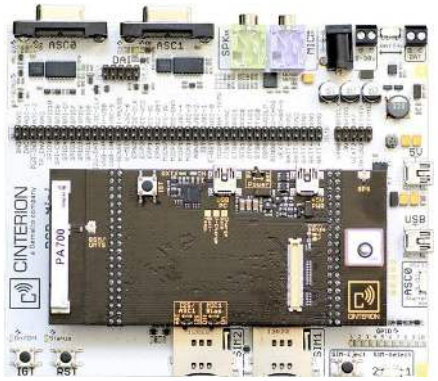
- Combine **DSB75** and **Multi-Adapter** for broadest testing scope including industry standard audio connectors, serial ports, USB and full-access to module pins

Cost-efficient development



- Use **Starter Kits** as a stand alone solution to evaluate Cinterion Wireless Modules
- Combine with **DSB-mini** to expand the supported interfaces

DSB-Mini & Starter kit << >> DSB75 & Adapter



- Cost effective & easy setup
- All modules with B2B 60/80pin supported
  - Older modules (e.g. MC55) **not supported**
  - will support new modules
- Dual SIM, Antenna & wide power supply
- Starterkit can operate stand allown
  => suitable for field tests
- No reference environment

- Supports all modules
- **Reference environment**
- Higher cost

For most cases slightly different features, check out you really need...

Preferred solution: Starterkit + DSB Mini

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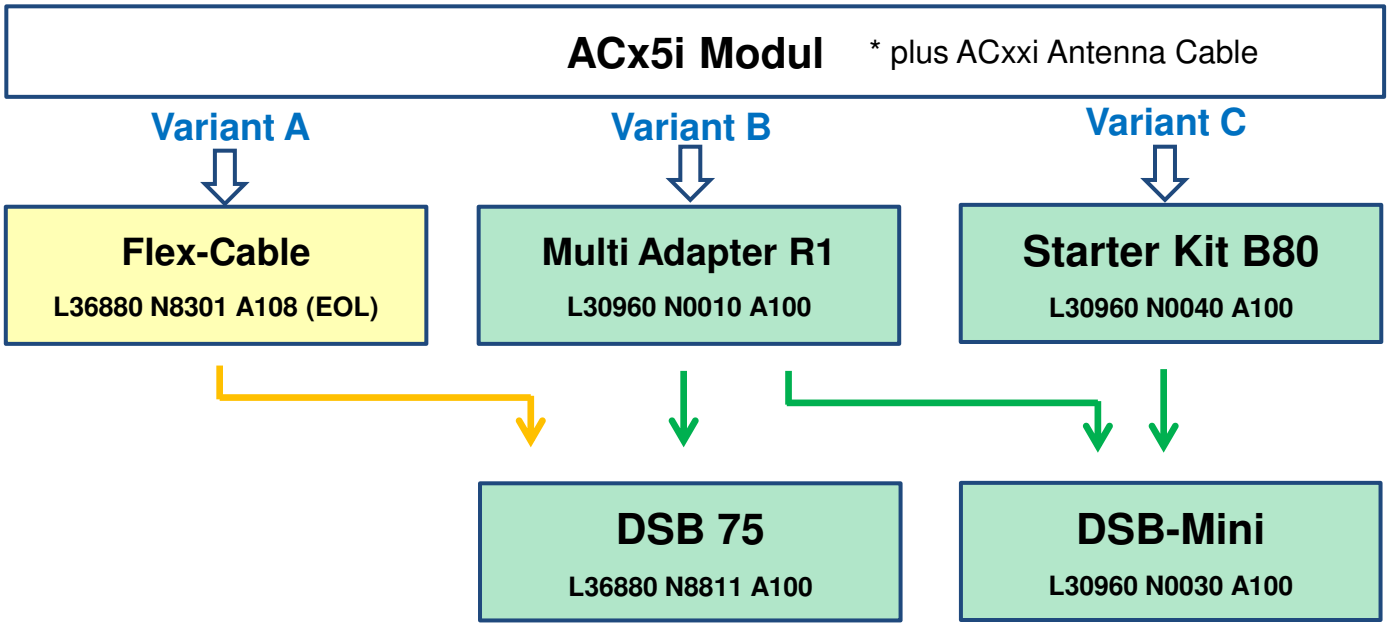
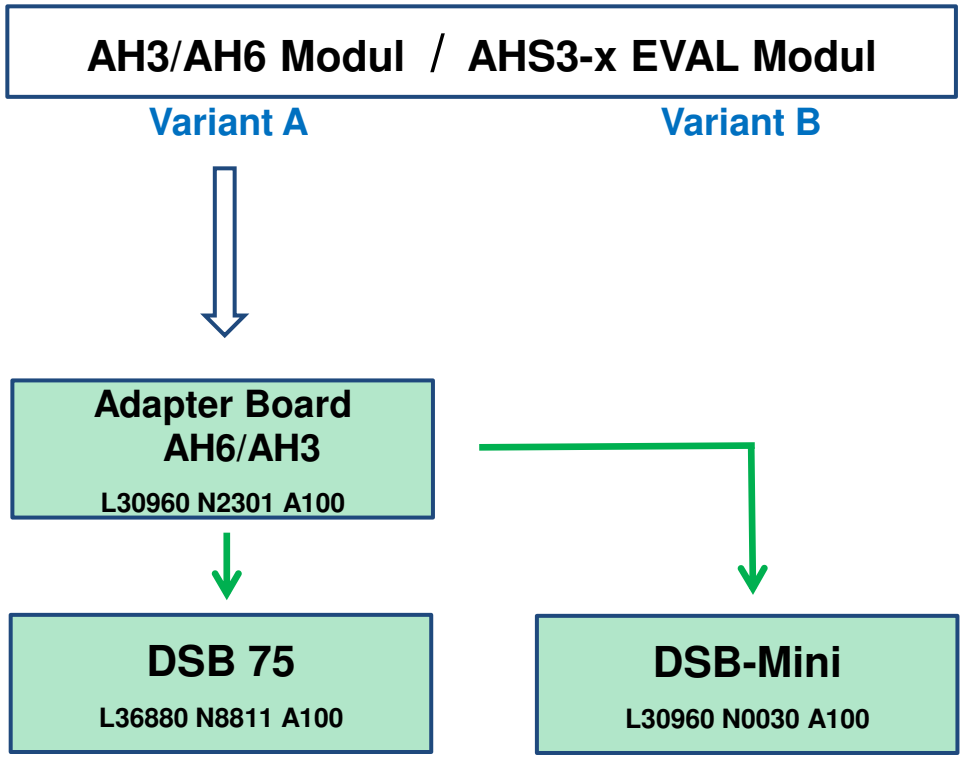
Development Accessories Overview

AC65i / AC75i

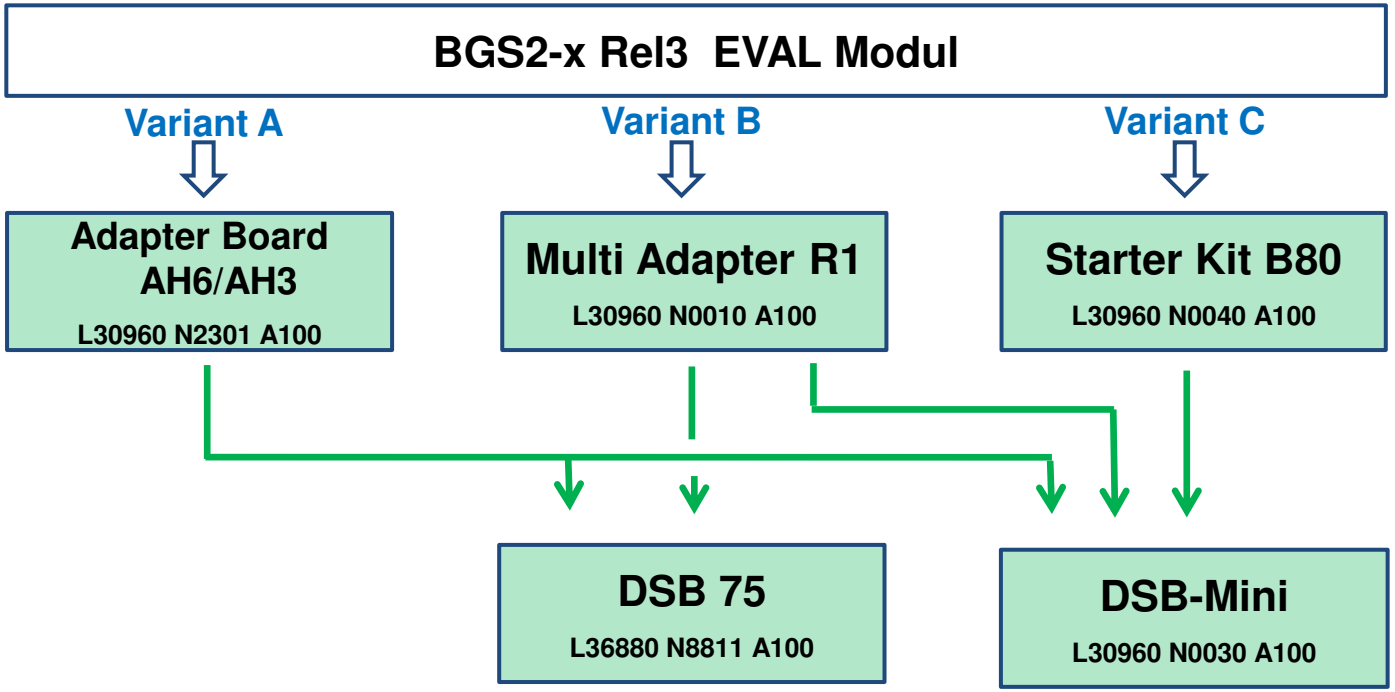


Development Accessories Overview

AH3 / AH6 / AHS3-W / AHS3-US

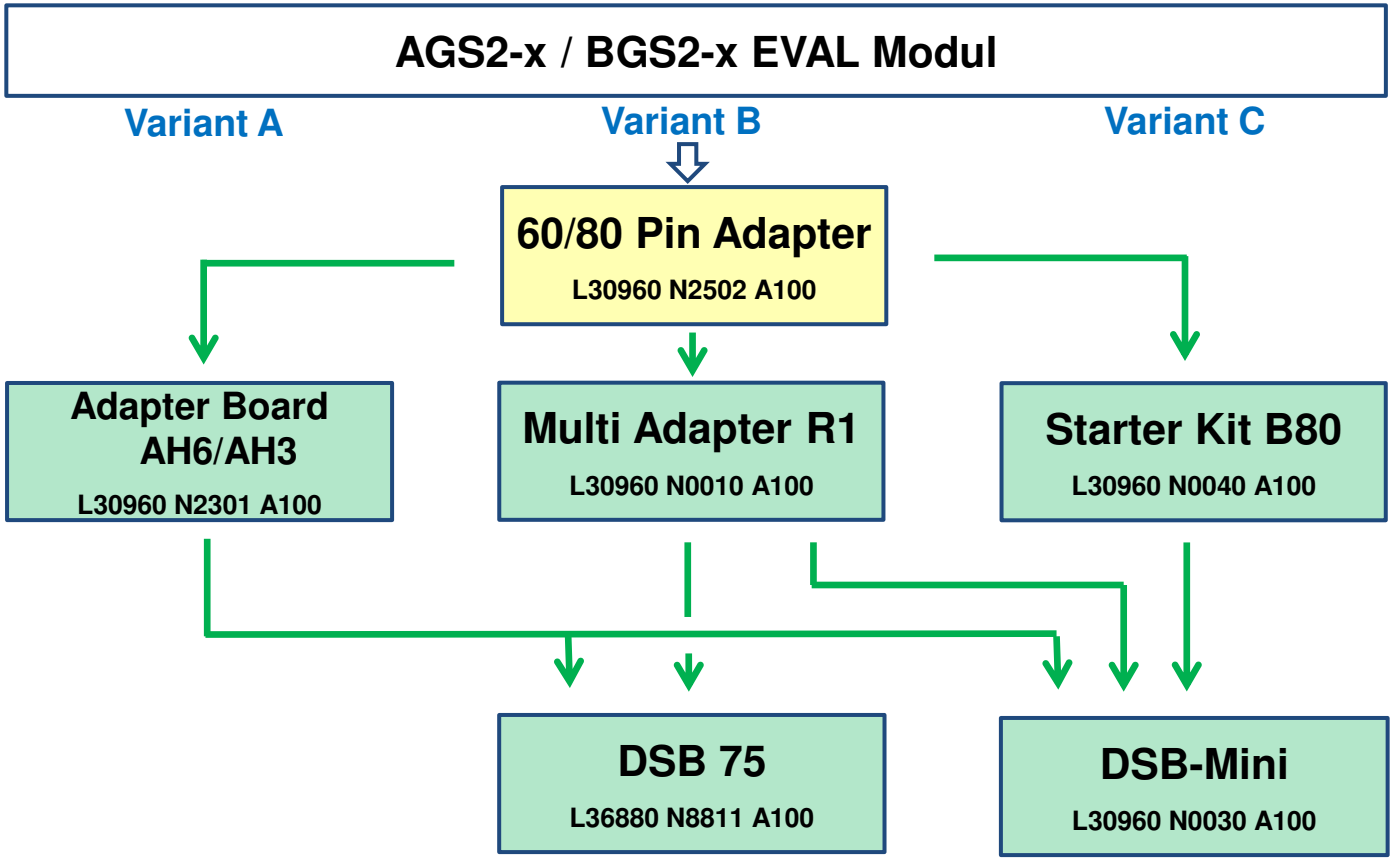


BGS2-E Rel3 / BGS2-W Rel3



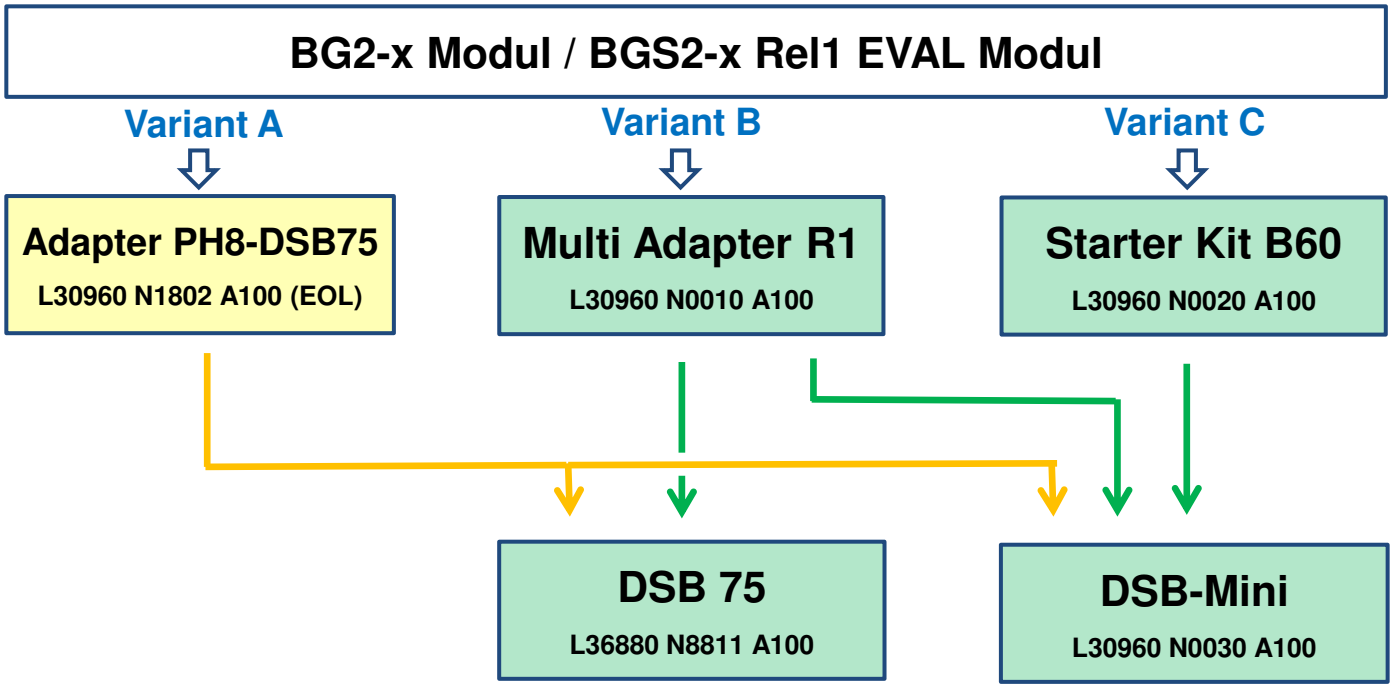
Development Accessories Overview

AGS2-E (PGS8) / AGS2-W / BGS2-E Rel2 / BGS2-W Rel2



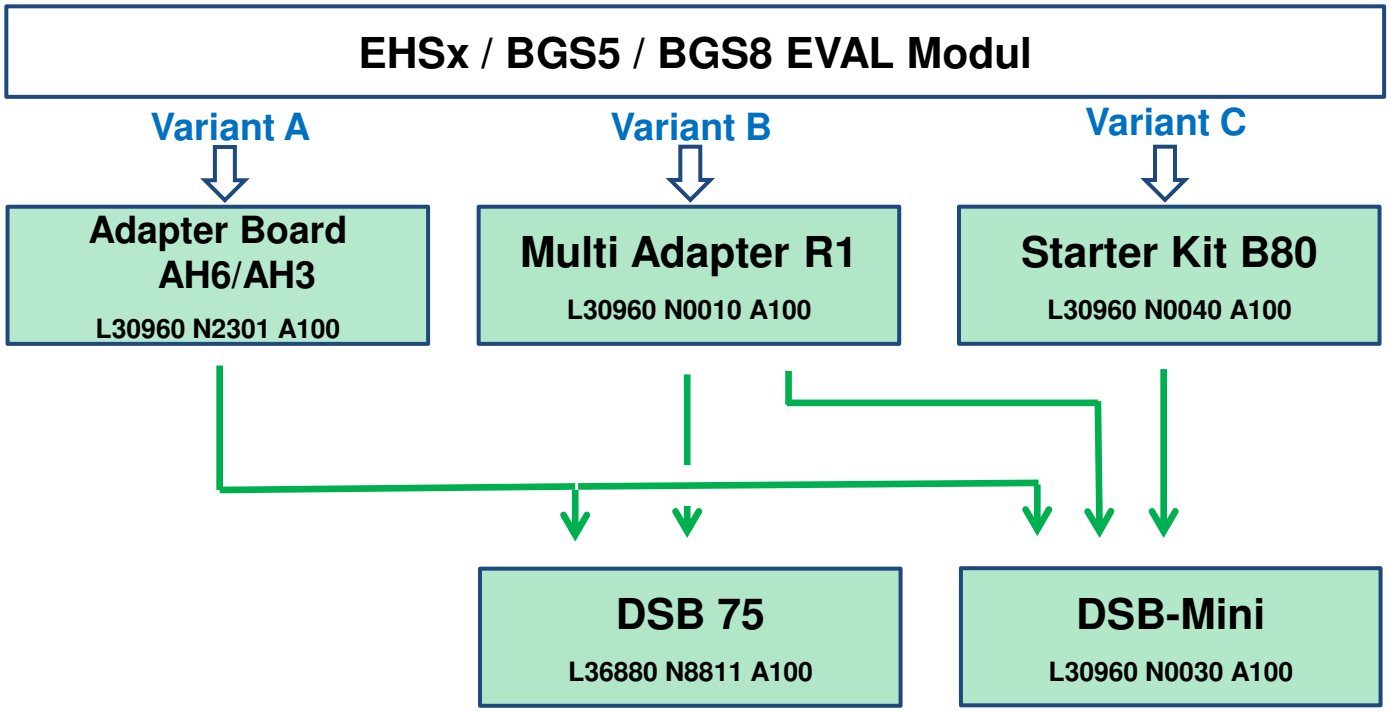
Development Accessories Overview

BG2-E / BG2-W / BGS2-E Rel1 / BGS2-W Rel1



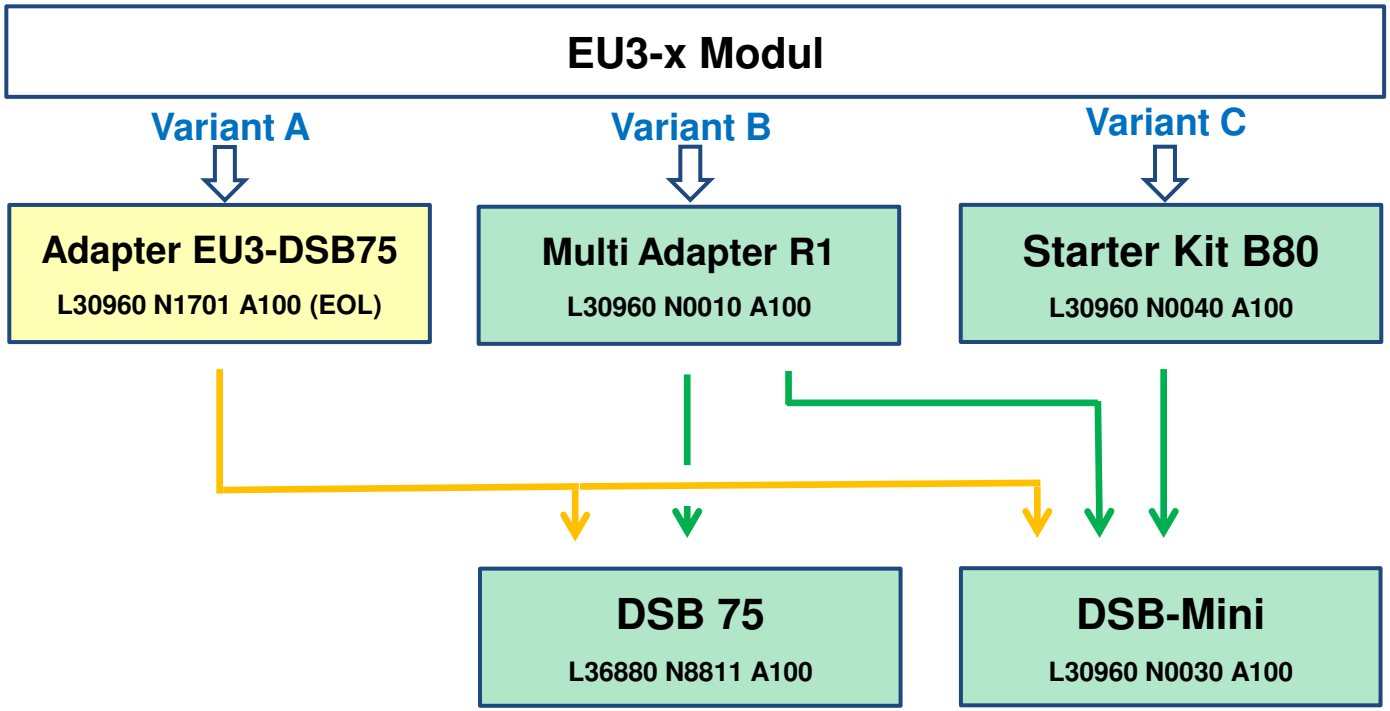
Development Accessories Overview

EHS5-E / EHS5-US / EHS6 / EHS8 / BGS5 / BGS8



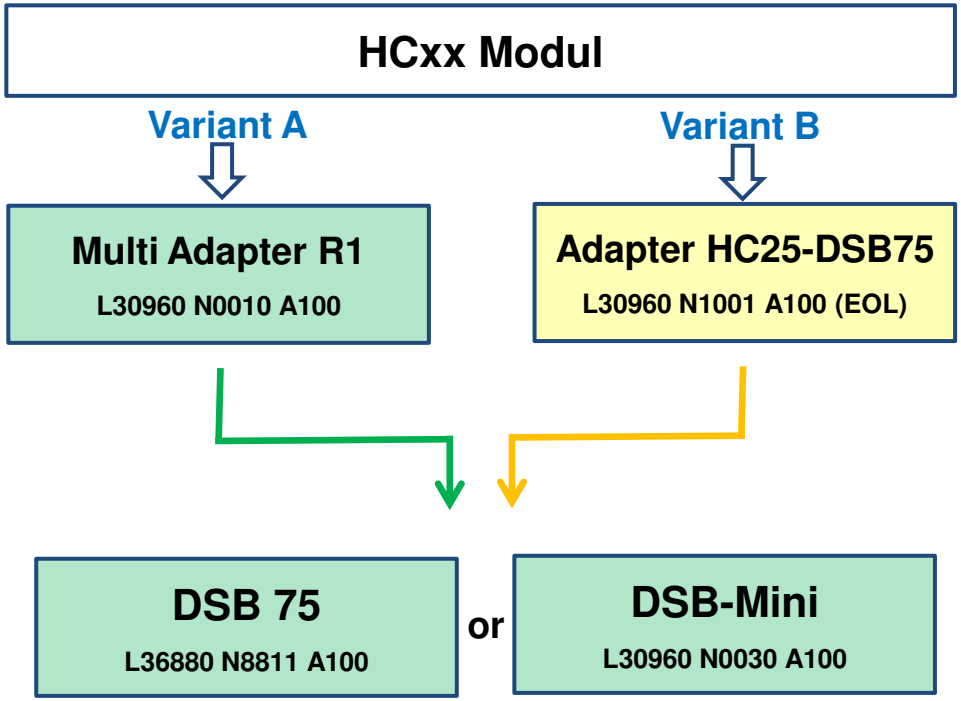
Development Accessories Overview

EU-E / EU3-P



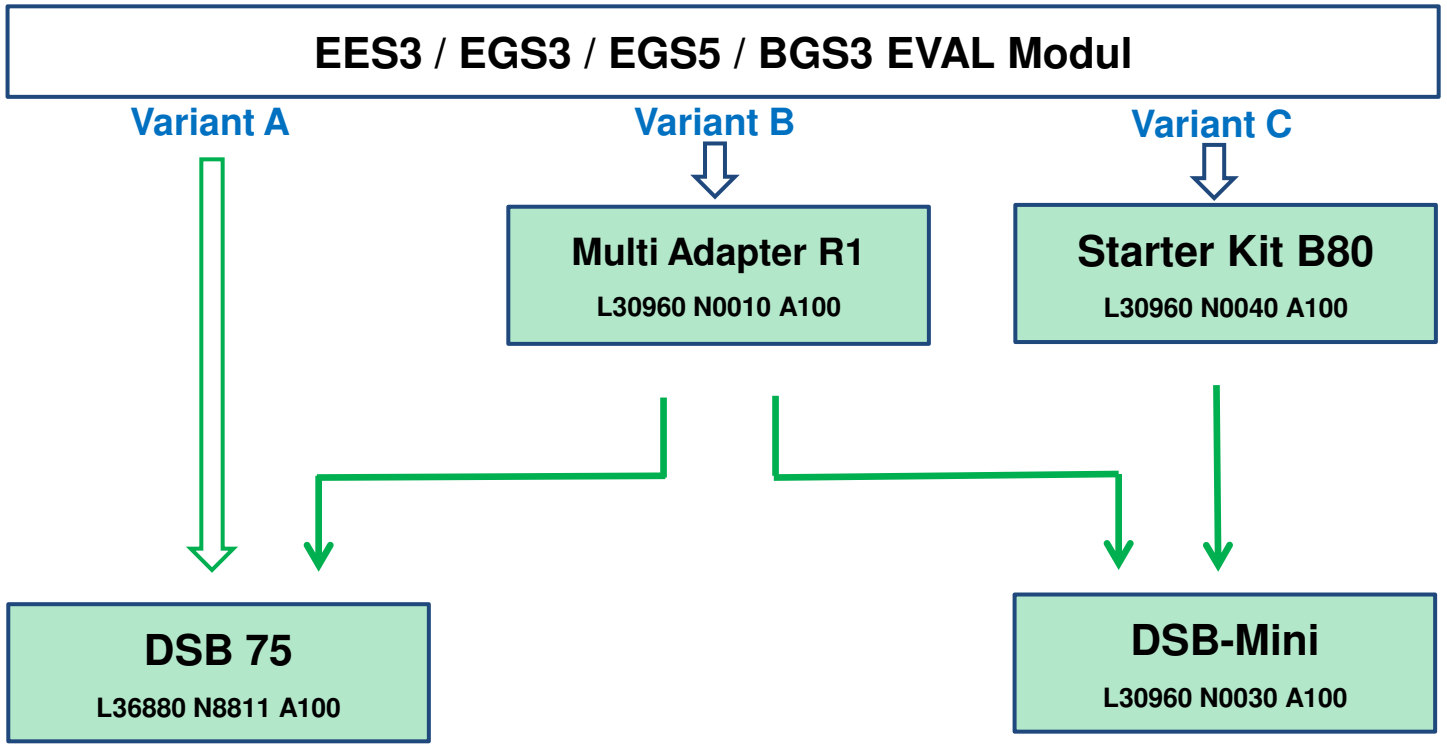
Development Accessories Overview

HC15 / HC25 / HC28



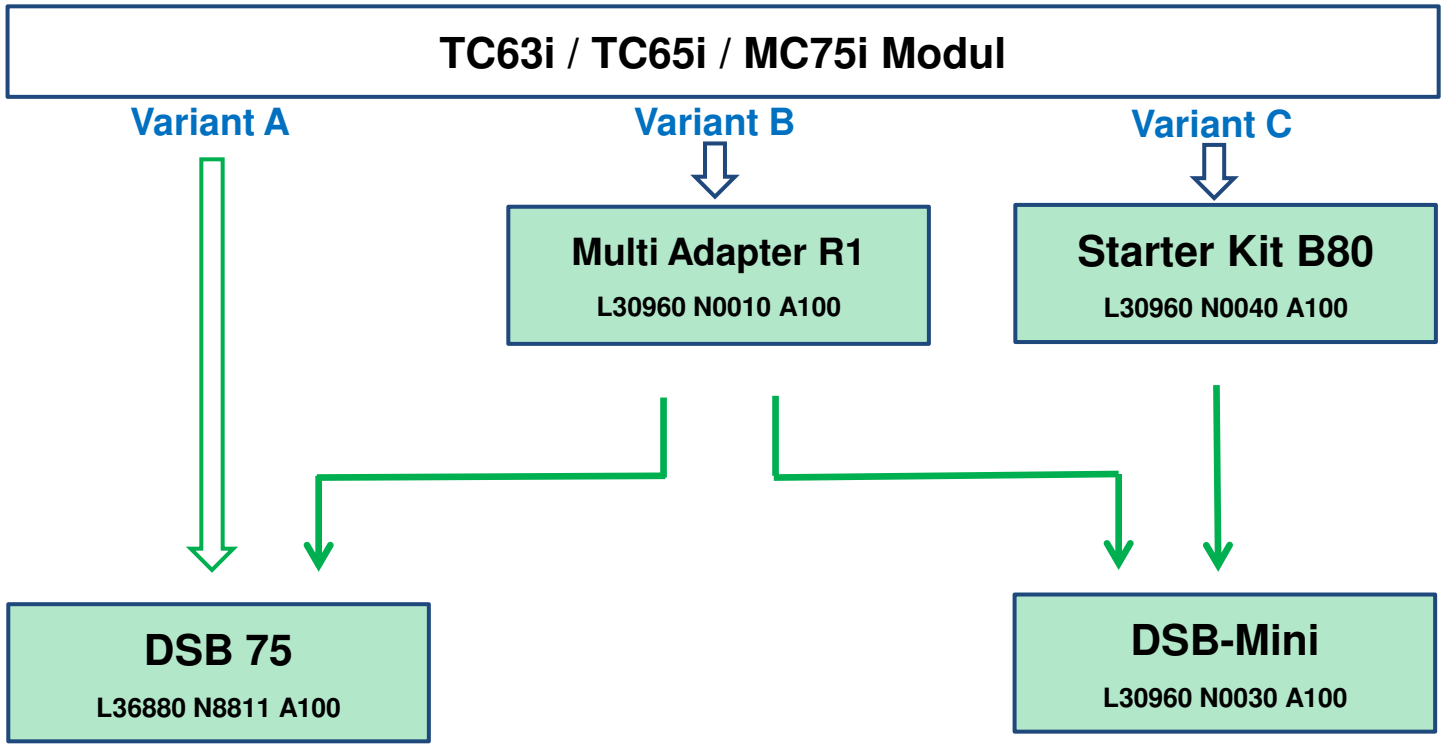
Development Accessories Overview

EES3 / EGS3 / EGS5 / BGS3



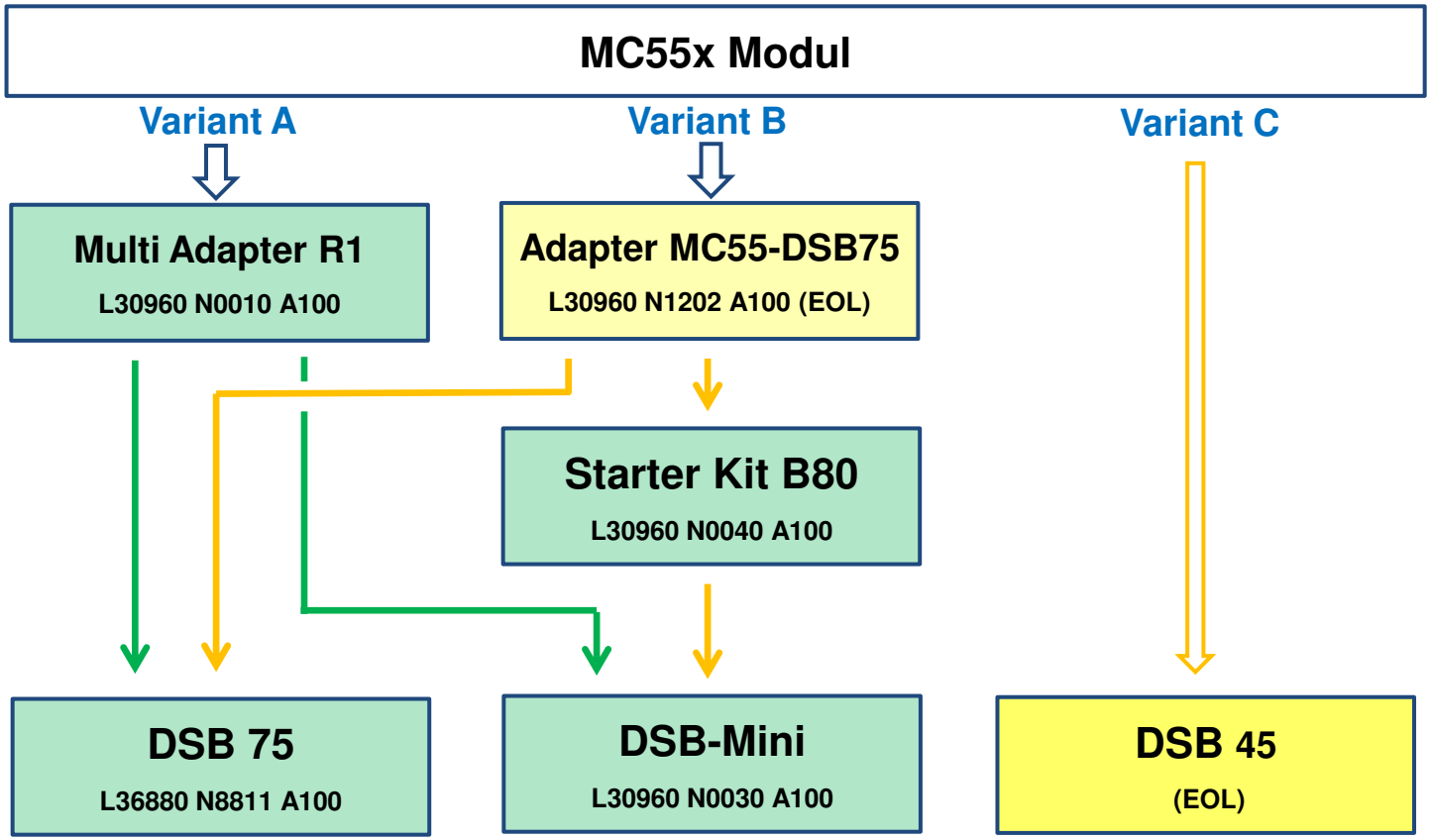
Development Accessories Overview

TC63i / TC65i / MC75i



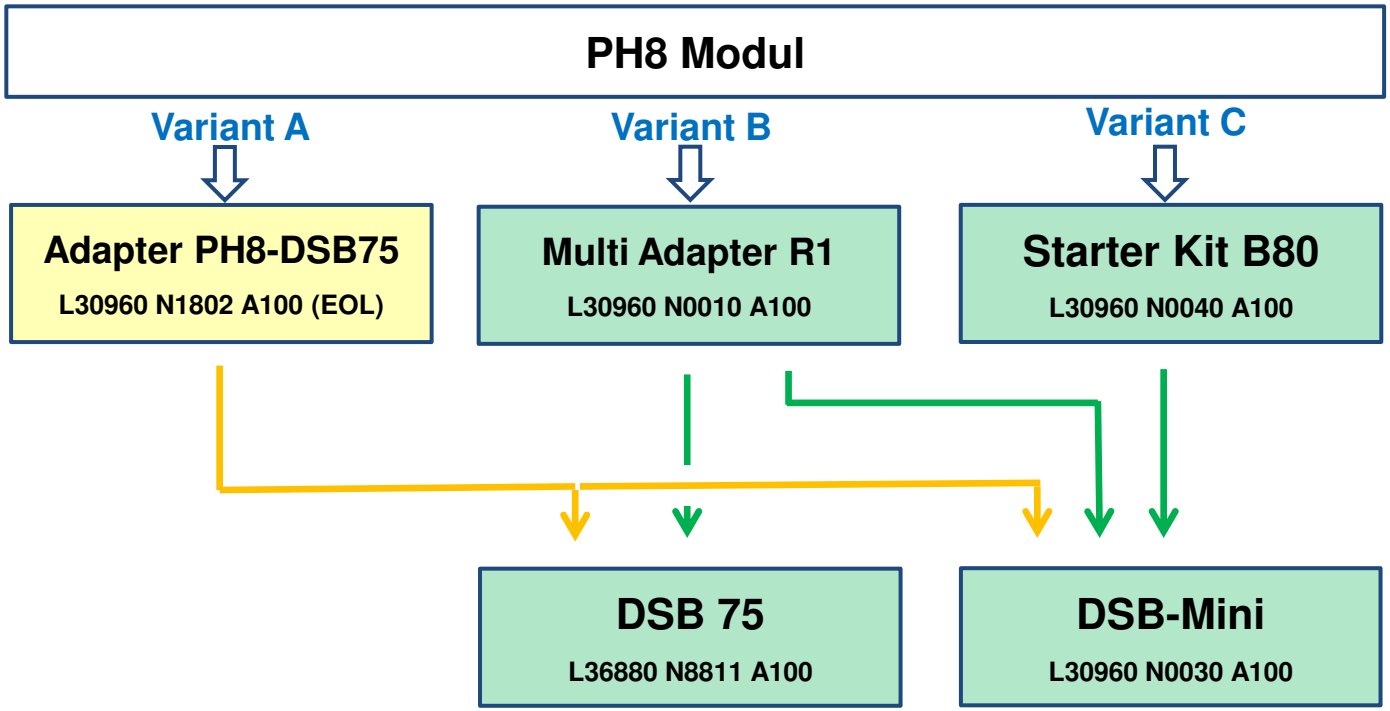
Development Accessories Overview

MC55 /MC55i / MC55i-W



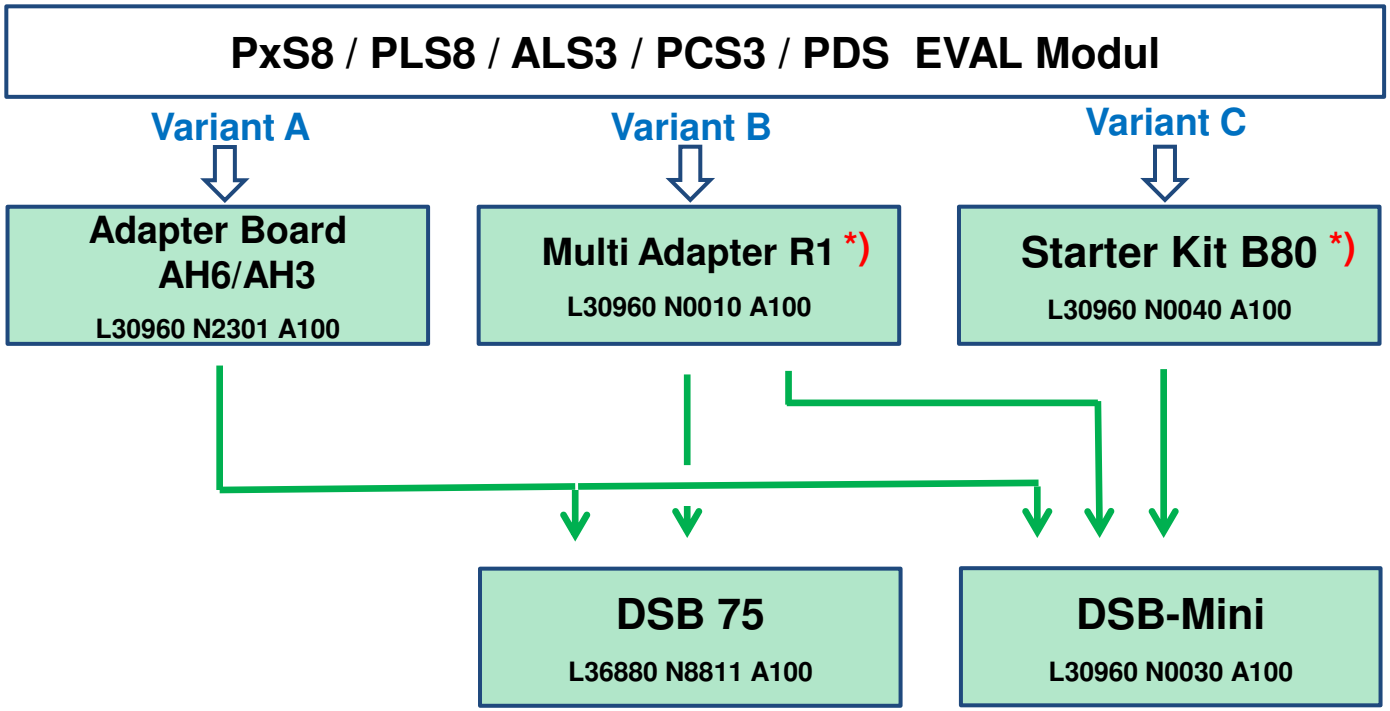
Development Accessories Overview

PH8 / PH8-J / PH8-K / PH8-P



Development Accessories Overview

PHS8-x / PXS8 (PVS8) / PLS8-x / ALS3-x / PCS3 / PDSx



*) Applicable if U-FL RF connector soldered manually on Eval module