COMPAL

SMART ASSISTANT

Jupiter II

6+2 PCS MIC ARRAY	**10W+5W** SPEAKERS	**FOV(H) 130°** CAMERA
802.11ac WIRELESS	**ZIGBEE**	**6** environmental **SENSORS**
Bluetooth	**Z-WAVE**	

COMPAL

Product Brief

The Compal Jupiter II, the all-in-one Smart Assistant, is the first offered as a completed system for the development on audio/ image intelligence and home automation control.

It is equipped with a Intel® Atom™ processor that gives you Intel level performance you've come to expect and quality you can count on. It includes 8GB (upgradable to 16GB) of on-board storage for programing your application.

The Jupiter II features a far-field microphone array of 8 microphones capturing individual voice several meters away. It hears your requests and questions from any direction across the room. Incorporate with 2.1 channels high quality speakers giving rich and crystal clear sound for both voice AI interaction and streaming music.

The intelligence could be implemented on Jupiter II is not only for Virtual Personal Assistant (VPA), but also image one. The Jupiter II installs a wide angle camera, up to 130 degrees on horizontal view, allowing capturing clear images or high-definition video further image and video analytics, such as facial recognition, behavior observation, event detection, etc.

With plenty of wirelesses, include WiFi, Bluetooth, Zigbee, and Z-wave, you can connect with various smart home edge products, and interact and control among different types of wireless edge devices to customize your experience.

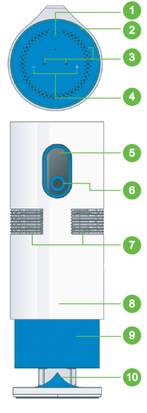
Detecting the status of surrounding is also essential for the home automation. The Jupiter II contains six types of environmental sensors: temperature, relative humidity, pressure, ambient light, air quality (VOC), PIR motion, delivering diverse and full-range of information you need for the rule setting.

The system is preinstalled with Linux Ostro. It is compatible with Intel® Smart Home Development Acceleration Platform (SHDAP) SDK. For the Intel SHDAP detail information, please contact regional Intel representative.

Features & Appearance

Top and Front Views

1. Ambient sensor
2. LEDs indication ring
3. Microphone
4. Volume up/ down buttons
5. Camera
6. PIR sensor
7. Thermal holes
8. Speaker (Woofer)
9. Speaker (Tweeter)
10. Sound reflection corn

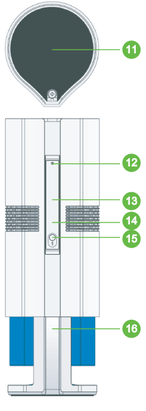


Features & Appearance (continue)

Bottom and Rear Views

11. Rubber foot
12. Reset hole
13. MicroUSB (UART)*
14. USB 2.0*
15. DC-in power connector
16. Stand

**under the sticker*



Technical Specifications

Processor
- Intel® Atom™ processor x5-E8000
- 2M Cache, up to 2.00 GHz

System Memory
- DDR3L 2G
- Upgradable to 8GB

Storage Capability
- 8GB eMMC soldered-down
- Upgradable to 16GB

Peripheral Connectivity
- AzureWave AW-CBN178NF Dual Band Wireless 802.11a/b/g/n/ac, 2x2
- Bluetooth 4.2 +EDR/ BLE
- SigmaDesign Z-wave
- MMBNet Zigbee/ Zigbee Pro (2.0)
- TELIT 4G LTE Module (optional)

System BIOS
- 128MB Flash EEPROM

Hardware Management Feature
- Voltage and temperature sensing
- ACPI-compliant power management control

Microphone
- 6+2 microphone array
- Far field >5m, 98%

Speaker
- 1 x Tweeter, 5W
- 1 x Woofer, 10W

Camera
- 2 Megapixel
- FOV (H): 130 degrees

Top Panel Control
- 1 x Volume Up
- 1 x Volume Down

Environmental Sensor
- 1 x 3-in-1 Temperature, Relative Humidity, Pressure
- 1 x Ambient light
- 1 x Air quality (VOC)
- 1 x PIR motion

Expansion Capabilities
(for code development)
- 1 x MicroUSB (UART)
- 1 x USB 2.0

Mechanical Chassis Size
- 281.18 mm x Φ 95.04~106.5 mm

Pre-loaded OS
- Linux Ostro

Baseboard Power Requirements
- 12V, 24W, wall-mount AC-DC power adapter
- EU/ US AC adapter

Environment Operating Temperature
- 0°C to +40°C

Storage Temperature
- -20°C to +70°C

Product Safety Regulations and Standards
- EN 60950-1

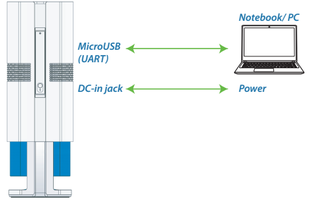
EMC Regulations and Standards
- FCC Part 15
- EN 55032/55024/301489
- ICES-003

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Environmental Regulation
- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU

Hardware Installation Instructions

1. Connect the device with power and notebook or PC.



2. The indication LEDs rings start running around 1 minutes. After the indication LEDs running off, the system boot up ready.
3. Use Linux command to build up your own applications.

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

➤ Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

➤ This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FOR MOBILE DEVICE USAGE (>20cm)

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Industry Canada Statement

❶ This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1) this device may not cause interference, and
2) this device must accept any interference, including interference that may cause undesired operation of the device.

❶ Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) l'appareil ne doit pas produire de brouillage, et
2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

❷ This Class B digital apparatus complies with Canadian ICES-003.

❷ Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

❸ This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.

❸ Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

❹ The County Code Selection feature is disabled for products marketed in the US/ Canada.

❹ La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

❺ **FOR MOBILE DEVICE (>20cm from body / low power)**

Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

❺ Déclaration d'exposition aux radiations:Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

❻ **FOR WLAN 5GHZ DEVICE**

Caution:

1) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
2) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
3) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
4) the worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.2(3) shall be clearly indicated. <for 5G B2 with DFS band only>
5) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

❻ Avertissement:

1) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
2) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.;
3) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
4) les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 3), doivent être clairement indiqués. <for 5G B2 with DFS devices only>
5) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

This device complies with **Directive 2014/53/EU** issued by the Commission of the European Community.

A minimum separation distance of 20 cm must be maintained between the user's body and the device, including the antenna during body-worn operation to comply with the RF exposure requirements in Europe.

- **Frequency bands and Powers**

  a. Frequency band(s) in which the radio equipment operates:
  - BT: 2.400 - 2.483 GHz
  - WIFI: 2.412 - 2.472 GHz & 5.180 - 5.825 GHz
  - Zigbee: 2.400 - 2.500 GHz
  - Zwave: (EU)868.4 & 868.85 MHz
    (US) 908.4 & 916 MHz

  b. Maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates:
  [Module]
  - BT: 2 dBm +/- 2 dBm
  - WIFI: [2.4 GHz radio band] (11b) 11M 16 dBm (11g) 54M 14 dBm (11n) HT40 11 dBm [5 GHz radio band] (11a) 54M 13 dBm (11n) HT40 10 dBm (11ac) VHT80 8 dBm
  - Zigbee: 18 dBm
  - Zwave: 4 dBm +/- 2 dBm

  [Antenna gain]
  - BT: 3.89 dBi
  - WIFI: [2.4 GHz radio band] (Main) 5.29 dBi (Aux) 3.89 dBi [5 GHz radio band] (Main) Max. 5.27 dBi (Aux) Max. 3.46 dBi
  - Zigbee: 0.5 dBi (ceramic chip antenna on module)
  - Zwave: 0.4 dB

- **WLAN 5GHz**

  Operations in the 5.15-5.35GHz band are restricted to indoor usage only.

- **Declaration of Conformity**

  We, **Compal Electronics, INC.**,

  Address: No. 581, Ruiguang Rd., Neihu District, Taipei City 11492, Taiwan (R.O.C.)

  declare that the below mentioned radio equipment type is in compliance with **Directive 2014/53/EU**.

  Model Name: EIH3
  Intended Use: Smart IOT
  Software Version: 3401.R.4418.17040NB
  Company Name: Telefication B.V.NB
  Company Number: 0560

The full text of the complied standards are as below listed:

1. Health (Article 3.1(a) of Directive 2014/53/EU)

Applied Standard(s):

- EN 62311 : 2008
- EN 62479 : 2010

2. Safety (Article 3.1(a) of Directive 2014/53/EU)

Applied Standard(s):

- EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A2: 2013

3. Electromagnetic compatibility (Article 3.1 (b) of Directive 2014/53/EU)

Applied Standard(s):

- EN 301 489-1 V2.1.1 / -17 V3.1.1
- Draft EN 301 489-3 V2.1.0
- EN 55032: 2012/ AC: 2013 + EN 55024: 2010

4. Radio frequency spectrum usage (Article 3.2 of Directive 2014/53/EU)

Applied Standard(s):

- EN 300 328 V2.1.1
- Draft EN 301 893 V2.0.7
- EN 300 220-1 V3.1.1/ -2 V3.1.1

FCC ID: GKRA30EIH30B03

Contains TLZ-CM389NF and XFFZ357PA20

Model name: EIH3

Trade name: Compal

CE

Trade Name: Compal

IC ID: 2533B-A30EIH30B03

Contains 6100A-CM389NF and 8365A-Z357PA20

Model Name: EIH3

Manufacturer: Compal Electronics Inc.

Manufacturer Address: No. 581, Ruiguang Rd., Neihu District, Taipei City 11492, Taiwan.

In the EU, this symbol means that this product must not be disposed of with household waste. It is your responsibility to bring it to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your local waste collection centre or your point of purchase.