Specifications

- **SoC**: 8th generation Intel® mobile ULT Processor
  - Intel® Core™ i7-8665UE (up to 4.4GHz, Quad-core, 8MB cache, TDP=15W)
  - Intel® Core™ i5-8365UE (up to 4.1GHz, Quad-core, 6MB cache, TDP=15W)
  - Intel® Core™ i3-8145UE (up to 3.9GHz, Dual-core, 4MB cache, TDP=15W)
  - Intel® Celeron® processor 4305UE (up to 2.0GHz, Dual-core, 2MB cache, TDP=15W)
  - Intel® Celeron® processor 4205U (up to 1.8GHz, Dual-core, 2MB cache, TDP=15W)

- **BIOS**: AMI UEFI BIOS

- **Memory**: 1 x DDR4 2600MHz SO-DIMM support up to 32GB

- **Graphics Engine**: Intel® UHD Graphics 620

- **Display Output**: Triple Independent Displays
  - 2 x HDMI 1.4 (up to 4096x2160@30Hz)
  - 1 x LVDS: 18/24-bit dual-channel LVDS by CH7511B DP to LVDS converter (up to 1920x1200@60Hz)

- **Ethernet**: 2 x Intel I211AT (colay with I210)
  - 1 x PCIe GbE LAN Intel i219 Controller

- **Embedded Controller**: ITE IT8587VG-FX

- **External I/O Interface**: 4 x USB 3.1 Gen2
  - 1 x PCIe GbE LAN Intel i219 Controller

- **Internal I/O Interface**: 1 x RS-232/422/485 cable
  - 1 x Viole 51021-0900 P=1.25, Wins Precision, RoHS

- **Audio**: 1 x 8-bit digital I/O (1x10 pin)
  - 1 x Smart fan connector (1x4 pin)
  - 1 x HD audio (2x5 pin, support 7.1 channel HD audio by AC-KIT-892HD-R10)

- **Power Supply**: 12V DC input
  - 1 x internal power connector (2x2 pin)
  - Support AT/ATX mode
  - Support ATX power connector

- **Smart Home**: Fanless heatsink module (Optional)

- **Dimensions (Unit: mm)**: 115mm x 165mm

- **Weight**: GW: 700g / NW: 350g

- **Features**: 3.5” SBC supports Intel® 8th generation Whiskey Lake processor with DDR4 SO-DIMMs
  - Triple display with dual HDMI, LVDS selection
  - M.2 A Key, PCIe Mini slot with mSATA support
  - COM, USB 3.1 Gen2, SATA 6Gb/s support
  - Support temperature operation: -20°C ~ 60°C
  - Support Auto Flow Control over RS-485

- **Packing List**:
  - 1 x WAFFER-ULT5 single board computer with Heatspreader
  - 1 x Power cable
  - 1 x SATA with power cable kit
  - 2 x RS-232/422/485 cable
  - 1 x QIG (Quick Installation Guide)

- **Ordering Information**:
  - WAFFER-ULT5-7/i5-R10
  - WAFFER-ULT5-5/i5-R10
  - WAFFER-ULT5-3/i5-R10
  - WAFFER-ULT5-C-R10
  - WAFFER-ULT5-CE-R10
  - WAFFER-ULT5-2020-V10