It’s time to prepare! No, not for that COVID-19 thingie, it’s too late, but since 2020 has not started the best way we should prepare for all eventualities. It all started badly as I fell off my bicycle on New Year’s eve, and it went south from there, from talks of world war three in January, to the thread of a virus pandemic that could kill millions worldwide, to the start of the first global great depression.

2020 will be the year of doom, and we should expect massive earthquakes, once in a hundred-year megatsunami what will wipe entire cities, gigantic locust swarms in southern Europe, climate change induces, and leading famine, a couple of large asteroids hitting the hearth, and so on. But we should not forget the nuclear threat either via nuclear war or damaged nuclear reactors following natural disasters or terrorist attacks.

Microcontrollers will have an important role to play in AIoT (AI + IoT) applications as they
provide the lowest cost and power consumption. Performance is limited but we start seeing MCUs with AI accelerators such as GreenWaves GAP9 multi-core RISC-V microcontroller or Kendryte K210 RISC-V MCU with a KPU AI accelerator.

**PCIe-enabled Intel 9th Gen computer uses water cooling** [6]

Vecow’s Linux-friendly ?RCX-1500W? edge AI computer cools its 9th Gen Coffee Lake Refresh chips and up to 4x PCIe cards with a water-cooling system.

We rarely see liquid cooling systems on embedded computers because they tend to be complex, bulky, expensive, and must be carefully installed and maintained to avoid damage to the computer. Yet, embedded computers have never been so powerful and hot as the latest PCIe-enabled edge AI monsters that are in vogue these days. When you’re running high-powered graphics cards with Intel 8th or 9th Gen CPUs, you just may need to get a little wet.

**Modular rolling stock computer is loaded with wireless** [7]

Eurotech’s rugged, railway certified ?BoltGate 20-31? transportation gateway runs Linux on an Apollo Lake SoC with standard LTE and GNSS, a choice of WiFi/BT or MVB, and optional expansion modules for GbE, storage, serial/CAN, DIO, and odometer.

Eurotech announced an Intel Apollo Lake based ?smart transportation? computer due in the second half of the year that follows its Bay Trail based BoltGATE 20-25 and BoltGATE 20-25 MVB. The new BoltGate 20-31 computer similarly offers modular expansion and EN50155 railway certification and targets rolling stock applications including passenger infotainment and entertainment, train-to-ground communications, and fleet management.

**Kontron 3.5?-SBC-WLU Single Board Computer Takes CNVi M.2 WiFi Cards** [8]

**DSTIKE ESP32 Watch Development Board Comes with OLED or TFT Display** [9]

The watch can be programmed with Arduino core for ESP32 together with either ThingPulse OLED library or Arduino library for the ST7789 IPS SPI display depending on the model, and Adafruit Neopixel library. Also refer to the example sketches for the OLED display and TFT display.