The accelerometer is not enabled and cannot be used on the board.

There is no support for external C libraries on the board.

GPIO pins and communication protocols

GPIO interrupts are disabled. External devices cannot trigger an interrupt. The DTEK-V board has disabled interrupts from GPIO pins. This will be changed in the future, but not this year. The implication is that we must actively check the bit status from the external devices.

Communication protocols. Most sensors transmit data in a very simple manner. They transmit a '1' or a '0' depending on their state. For example, a bit is set to 1 if a sensor detects an object and 0 otherwise. As we said before, we need to poll for any state change of those bits. For transmitting more complex information (beyond a one-zero bit), devices use different communication protocols. A device may communicate using its own protocol (e.g., a PS2 keyboard). Some other devices may rely on general-purpose protocols, e.g., SPI or I2C. These general-purpose protocols are currently not supported natively on the board. In other words, there is no hardware on the board that implements the protocol and offers a simpler API to transmit data. The implication is that one has to implement the protocol from scratch entirely in software (i.e., in C) to make use of these protocols.