Haptic / Tactile feedback (or haptics) is the use of advanced vibration patterns and waveforms to convey information to a user or operator. The word ‘haptics’ is derived from the Greek phrase ‘I touch’.

Many products are designed to communicate with their users.

Historically these have been audible and visual alerts, such as LEDs, beeps, bells, amongst others. Haptic feedback, and it’s simpler relative ‘vibration alerting’, are in increasing demand to augment or replace the old alert methods.

Haptics uses a vibrating component (sometimes called actuator) such as a vibration motor or a linear resonant actuator which is driven by an electronic circuit.

It is common for a microcontroller to decide when to vibrate and with which pattern, and for a dedicated haptic driver chip to control the actuator.