

Kookaberry Apps & Files					
App ID	App	Peripherals	Description	Last Modified	MicroPython Version
app Folder					
KAP001	ListenLog		Teacher's app that listens for radio messages and writes them to a file	29/10/2019	1.10
KAP002	CountMe	Keyboard (P4)	This is a totaliser program which counts key presses on an attached keyboard	18/6/2019	1.10
KAP003	BalanceMe	Buzzer (P2)	Egg and Spoon emulator for Balance lesson with logging to a CSV file	17/4/2019	1.9.4
KAP004	Move Music	Loudspeaker (P4), Touch Sensor (P5)	Plays C Major Scale musical notes using gestures tracked by the accelerometer.	17/11/2019	1.9.4
KAP005	WeatherHere	DHT11 (P2) Anemometer (P4)	A local weather station reading temperature, absolute humidity and wind speed	5/1/2019	1.9.4
KAP006	LightMe	Light Sensor (P4) LED (P2)	Ambient light meter, lamp controller and datalogger	5/1/2029	1.9.4
KAP007	SenseMe	Motion Det (P5) Light Sens (P4) LED (P2)	Motion sensor and ambient light controller with datalogger	5/1/2019	1.9.4
KAP008	BounceMe		This measures, logs, and displays instantaneous acceleration using its on-board accelerometer	14/11/2019	1.10
KAP009	WaterMe	Soil Moisture (P4) Pump (P2)	Measures soil moisture and controls a pump to deliver water if dry	5/1/2019	1.9.4
KAP010	KookaTime TX KookaTime RX	DS3231 RTC (P3)	Sets and shares real time via Radio	31/12/2018	1.9.4
KAP011	Rock, Paper, Scissors		Play Rock Paper Scissors against the Kookaberry	19/9/2018	1.9.4
KAP012	Logic	Various digital Input (P4,5) and Output (P2)	Implements a selection of logic gates between digital inputs and a digital output	20/6/2019	1.9.4
KAP013	Analogue	Rotation Potentiometer Input (P4), Analogue Output (P2), Servo (P1)	- Demonstration of filling a tank (%) with proportional analogue control. - Demonstration of moving a servo (degrees) with proportional analogue control. - Option to connect real analogue peripherals	2/7/2019	1.9.4
KAP014	SenseDHT	DHT11/22 (P2)	Measures T and RH using either DHT11 or DHT22	20/10/2019	1.10
KAP015	Binary Numbers		A decimal to binary number conversion demonstration and puzzle setter	27/4/2019	1.10
KAP016	Compass		Compass with calibration using the Kookaberry's inbuilt magnetometer	16/3/2019	1.10
KAP017	Fractions101		Displays proper fractions and compares their relative sizes and adds/subtracts them	24/2/2019	1.10
KAP018	Metronome	Touch Sens (P1) Loudspeaker (P2)	A simulated metronome for providing music tempo	27/4/0109	1.10
KAP019	Music Demo	Loudspeaker (P2)	Plays a selection of musical tunes from micro:bit music library	8/2/2019	1.10
KAP020	Pulse	Heart Rate Sensor (P4)	Measures and displays a pulse waveform using a Heart Rate Sensor	3/3/2019	1.9.4

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KAP022	Semaphore	Buzzer (P2)	Sends and receives one of three signals over the radio: a wave, a like, and a digital output	11/3/2019	1.10
KAP023	WarmMe2	Thermistor (P5) Heater (P2)	Measure temperature using a NTC thermistor probe. Thermostat to control a heat source	12/1/2019	1.9.4
KAP024	CloseToMe	Ultrasonic Sensor (P4), LED (P2)	Reads an analogue ultrasonic proximity sensor and displaying GO/SLOW/STOP. A threshold distance for stop can be adjusted with the C and D buttons. An output signal is activated when it is safe to proceed. The Green, Orange, and Red LEDs are used as a traffic light.	24/7/2019	1.10
KAP025	MusicDemo	Loudspeaker (P2)	Plays tunes from the microbit musictunes file in the lib folder	28/4/2019	1.10
KAP026	SenseNTCT	NTCT (P5)	Measure temperature using a negative temperature coefficient thermistor (NTCT) sensor. Logs the measurements into a file at an interval specified in Kappconfig.txt. Broadcasts the sensor readings over the packet radio in the format [NTCT,Temp]	15/11/2019	1.10
KAP027	SenseRx		This program listens to the packet radio, and displays messages received. The program records what it receives to file in SenseRxLog.csv in the root directory. It is intended to be used with the SenseXXX apps that measure and log various sensors	15/11/2019	1.10
KAP028	SenseShake		Measures overall acceleration using the Kookaberry's inbuilt accelerometer. Logs average and peak acceleration into a file at an interval specified in Kappconfig.txt. Broadcasts the average and maximum accelerations over the packet radio in the format [SHK,AccAvg,AccMax]	15/11/2019	1.10
KAP029	Stopwatch		Measures duration of an event. Normal stopwatch functions	5/7/2018	
KAP030	WaterText		Displays "Water Me!" in large font and then "Thank You" for 3 secs on exit. Provided as example of how easy it is to change text on screen	5/8/2019	1.10
KAP031	RTTLMusicDemo	Loudspeaker (P2)	Plays tunes from the Nokia ringtone library	20/6/2019	1.10
Retired	Log Accel		Measures and logs the changes in acceleration along the three x, y, and z axis at 20 ms intervals for a variable length of time set by the C and D buttons. The values are written to a .csv file in the serial memory and can be accessed by a PC through the USB connection.	5/7/2018	
KAP032	K Vitals		Reads the critical parameters of the Kookaberry plus the radio signal strength	25/11/2018	1.9.4
Retired	LED Cycle		Example only. Cycles LED's on front of board	5/7/2018	
lib Folder					
	doomsday		A python implementation of Conway's Doomsday algorithm Used to work out the day of the week given a date.	1/1/2019	1.9.4

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	ds3231_port		Portable driver for DS3231 precision real time clock.		
	kapputils		Reads the Kappconfig text file and divides it into elements that can be used by the processor in running apps	1/1/2019	1.9.4
	kbtimer		Module to measure the length of a button press and return a flag if preset time is expired	9/8/2019	1.10
	kcpu		Module to measure and monitor key Kookaberry operating parameters	25/6/2019	1.10
	logger		Module to set up and update a datalogging file. Only one instance of a datalogging file can exist because of limitations on Kookaberry Timers	27/6/2019	1.10
	musictunes		The library of tunes in MicroPython in the Microbit library		
	ntct		Module to measure temperature using a NTC thermistor probe. Calibrated using the Steinhart-Hart Equations. A separate spreadsheet is used to derive the calibration coefficients	25/6/2019	1.10
	rttl		This library can parse RTTTL text lines and delivers the frequency and duration for each note. A typical RTTTL string looks like this: Entertainer:d=4,o=5,b=140:8d,8d#,8e,c6,8e,c6,8e,2c.6,8c6,8d6,8d#6,8e6,8c6,8d6,e6,8b,d6,2c6,p,8d,8d#,8e,c6,8e,c6,8e,2c.6,8p,8a,8g,8f#,8a,8c6,e6,8d6,8c6,8a,2d6		
	songs		Library of mobile phone RTTL ring tunes (includes Super Mario theme)		
	TimeConfig		Utility to read and set Kookaberry time	15/11/2019	1.10
Root Directory					
	Kappconfig		Text file containing variables used by the Kookaberry such as Name and sampling interval		
	Ktime		Text file containing time read by the TimeConfig file.		