

### 3.2. Pin Description

**Table 4: Pin description**

Pin name	Pin number	I/O	Description	Comment
<b>Power supply</b>				
VBAT	1,42	I	Power supply	
VRTC	56	I/O	Power supply for RTC	It is recommended to connect with a battery or a capacitor (e.g. 4.7uF).
VEXT	18	O	2.8V power output	If these pins are unused, keep open.
GND	2,6,8,35,37,38,39,41,43,44,45,58,67,71,72,73,76,77,78,79,80,81,82,83,84,85,86,87,88		Ground	GND for VBAT recommend to use 2,43,44,45pin
<b>Power on/down</b>				
PWRKEY	48	I	PWRKEY should be pulled low at least 1 second and then released to power on/down the module.	Internally pulled up to VBAT.
<b>Audio interfaces</b>				
MIC1P	52	I	Differential audio input	If these pins are unused, keep open.
MIC1N	12			
SPK1P	53	O	Differential audio output	
SPK1N	13			
MIC2P	9	I	Differential audio input	
MIC2N	10			
SPK2P	51	O	Differential audio output	
SPK2N	11			
<b>PCM interface</b>				
PCMCLK	29	O	PCM interface for audio	If these pins are unused, keep open.
PCMOUT	30	O		
PCMSYNC	65	O		
PCMIN	66	I		
<b>Keypads interface</b>				
COL4	24	I	Support up to 50 buttons (5*5*2)	If these pins are unused, keep open. (Pin number 20 external cannot be pulled down)
COL3	21	I		
COL2	22	I		
COL1	25	I		
COL0	20	I		
ROW4	63	O		
ROW3	23	O		