

nRF52833				
Pin	Name	Function	Description	Recommended usage
A8	P0.31	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN7	Analog input	Analog input	
A10	P0.29	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN5	Analog input	Analog input	
A12	P0.02	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN0	Analog input	Analog input	
A14	P0.19	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
A16	P1.05	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
A18	N.C.			
A20	P0.25	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
A22	VDD	Power	Power supply	
A23	XC2	Analog input	Connection for 32 MHz crystal	

nRF52840				
Pin	Name	Function	Description	Recommended usage
A8	P0.31	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN7	Analog input	Analog input	
A10	P0.29	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN5	Analog input	Analog input	
A12	P0.02	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN0	Analog input	Analog input	
A14	P1.15	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
A16	P1.13	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
A18	DEC2	Power	1.3 V regulator supply decoupling	
A20	P1.10	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
A22	VDD	Power	Power supply	
A23	XC2	Analog input	Connection for 32 MHz crystal	

B1	VDD	Power	Power supply	
B3	DCC	Power	DC/DC converter output	
B5	DEC4	Power	1.3 V regulator supply decoupling	Must be connected to DEC6 (pin E24)
B7	VSS	Power	Ground	
B9	P0.30	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN6	Analog input	Analog input	
B11	P0.28	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN4	Analog input	Analog input	
B13	P0.03	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN1	Analog input	Analog input	
B15	P1.03	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
B17	P0.23	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
B19	N.C.			
B24	XC1	Analog input	Connection for 32 MHz crystal	

B1	VDD	Power	Power supply	
B3	DCC	Power	DC/DC converter output	
B5	DEC4	Power	1.3 V regulator supply decoupling	Has to be connected to DEC6 (pin E24)
B7	VSS	Power	Ground	
B9	P0.30	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN6	Analog input	Analog input	
B11	P0.28	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN4	Analog input	Analog input	
B13	P0.03	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	AIN1	Analog input	Analog input	
B15	P1.14	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
B17	P1.12	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
B19	P1.11	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
B24	XC1	Analog input	Connection for 32 MHz crystal	

C1	DEC1	Power	1.1 V regulator supply decoupling	
D2	P0.00	Digital I/O	General purpose I/O	
	XL1	Analog input	Connection for 32.768 kHz crystal	
D23	DEC3	Power	Power supply, decoupling	
E24	DEC6	Power	1.3 V regulator supply decoupling	Must be connected to DEC4 (pin B5)
F2	P0.01	Digital I/O	General purpose I/O	
	XL2	Analog input	Connection for 32.768 kHz crystal	
F23	VSS_PA	Power	Ground (radio supply)	
G1	P0.26	Digital I/O	General purpose I/O	
H2	P0.27	Digital I/O	General purpose I/O	
H23	ANT	RF	Single-ended radio antenna connection	<a href="#">See Reference circuitry for guidelines on how to ensure good RF performance</a>
I1	P0.04	Digital I/O	General purpose I/O	

C1	DEC1	Power	1.1 V regulator supply decoupling	
D2	P0.00	Digital I/O	General purpose I/O	
	XL1	Analog input	Connection for 32.768 kHz crystal	
D23	DEC3	Power	Power supply, decoupling	
E24	DEC6	Power	1.3 V regulator supply decoupling	Has to be connected to DEC4 (pin B5)
F2	P0.01	Digital I/O	General purpose I/O	
	XL2	Analog input	Connection for 32.768 kHz crystal	
F23	VSS_PA	Power	Ground (radio supply)	
G1	P0.26	Digital I/O	General purpose I/O	
H2	P0.27	Digital I/O	General purpose I/O	
H23	ANT	RF	Single-ended radio antenna connection	<a href="#">See Reference circuitry for guidelines on how to ensure good RF performance</a>
I1	P0.04	Digital I/O	General purpose I/O	

J1	AIN2	Analog input	Analog input	
J24	P0.10	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	NFC2	NFC input	NFC antenna connection	
K2	P0.05	Digital I/O	General purpose I/O	
	AIN3	Analog input	Analog input	
L1	P0.06	Digital I/O	General purpose I/O	
L24	P0.09	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	NFC1	NFC input	NFC antenna connection	
M2	P0.07	Digital I/O	General purpose I/O	
	TRACECLK	Trace clock	Trace buffer clock	
N1	P0.08	Digital I/O	General purpose I/O	
N24	DEC5	Power	1.3 V regulator supply decoupling	
P2	P1.08	Digital I/O	General purpose I/O	
P23	P1.07	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	P1.09	Digital I/O	General purpose I/O	

J1	AIN2	Analog input	Analog input	
J24	P0.10	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	NFC2	NFC input	NFC antenna connection	
K2	P0.05	Digital I/O	General purpose I/O	
	AIN3	Analog input	Analog input	
L1	P0.06	Digital I/O	General purpose I/O	
L24	P0.09	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	NFC1	NFC input	NFC antenna connection	
M2	P0.07	Digital I/O	General purpose I/O	
	TRACECLK	Trace clock	Trace buffer clock	
N1	P0.08	Digital I/O	General purpose I/O	
N24	DEC5	Power	1.3 V regulator supply decoupling	
P2	P1.08	Digital I/O	General purpose I/O	
P23	P1.07	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
	P1.09	Digital I/O	General purpose I/O	

R1	TRACEDATA3	Trace data	Trace buffer TRACEDATA[3]	
R24	P1.06	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
T2	P0.11 TRACEDATA2	Digital I/O Trace data	General purpose I/O Trace buffer TRACEDATA[2]	
T23	N.C.			
U1	P0.12 TRACEDATA1	Digital I/O Trace data	General purpose I/O Trace buffer TRACEDATA[1]	
U24	P1.04	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
V23	N.C.			
W1	VDD	Power	Power supply	
W24	P1.02	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
Y2	VDDH	Power	High voltage power supply	
Y23	P1.01	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only

R1	TRACEDATA3	Trace data	Trace buffer TRACEDATA[3]	
R24	P1.06	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
T2	P0.11 TRACEDATA2	Digital I/O Trace data	General purpose I/O Trace buffer TRACEDATA[2]	
T23	P1.05	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
U1	P0.12 TRACEDATA1	Digital I/O Trace data	General purpose I/O Trace buffer TRACEDATA[1]	
U24	P1.04	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
V23	P1.03	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
W1	VDD	Power	Power supply	
W24	P1.02	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only
Y2	VDDH	Power	High voltage power supply	
Y23	P1.01	Digital I/O	General purpose I/O	Standard drive, low frequency I/O only

AA24	SWDCLK	Debug	Serial wire debug clock input for debug and programming	
AB2	N.C.			
AC5	DECUSB	Power	USB 3.3 V regulator supply decoupling	
AC9	P0.14	Digital I/O	General purpose I/O	
AC11	P0.16	Digital I/O	General purpose I/O	
AC13	P0.18 nRESET	Digital I/O	General purpose I/O Configurable as pin RESET	
AC15	N.C.			
AC17	P0.21	Digital I/O	General purpose I/O	
AC19	N.C.			
AC21	N.C.			
AC24	SWDIO	Debug	Serial wire debug I/O for debug and programming	

AA24	SWDCLK	Debug	Serial wire debug clock input for debug and programming	
AB2	DCCH	Power	DC/DC converter output	
AC5	DECUSB	Power	USB 3.3 V regulator supply decoupling	
AC9	P0.14	Digital I/O	General purpose I/O	
AC11	P0.16	Digital I/O	General purpose I/O	
AC13	P0.18 nRESET	Digital I/O	General purpose I/O Configurable as pin RESET	QSPI/CSN
AC15	P0.19	Digital I/O	General purpose I/O	QSPI/SCK
AC17	P0.21	Digital I/O	General purpose I/O	QSPI
AC19	P0.23	Digital I/O	General purpose I/O	QSPI
AC21	P0.25	Digital I/O	General purpose I/O	
AC24	SWDIO	Debug	Serial wire debug I/O for debug and programming	

AD2	VBUS	Power	5 V input for USB 3.3 V regulator	
AD4	D-	USB	USB D-	
AD6	D+	USB	USB D+	
AD8	P0.13	Digital I/O	General purpose I/O	
AD10	P0.15	Digital I/O	General purpose I/O	
AD12	P0.17	Digital I/O	General purpose I/O	
AD14	VDD	Power	Power supply	
AD16	P0.20	Digital I/O	General purpose I/O	
AD18	P0.22	Digital I/O	General purpose I/O	
AD20	P0.24	Digital I/O	General purpose I/O	
AD22	P1.00 TRACEDATA0	Digital I/O Trace data	General purpose I/O Trace buffer TRACEDATA[0]  Serial wire output (SWO)	
AD23	VDD	Power	Power supply	
Die pad	VSS	Power	Ground pad	Exposed die pad must be connected to ground (VSS) for proper device operation

AD2	VBUS	Power	5 V input for USB 3.3 V regulator	
AD4	D-	Digital I/O	USB D-	USB
AD6	D+	Digital I/O	USB D+	USB
AD8	P0.13	Digital I/O	General purpose I/O	
AD10	P0.15	Digital I/O	General purpose I/O	
AD12	P0.17	Digital I/O	General purpose I/O	
AD14	VDD	Power	Power supply	
AD16	P0.20	Digital I/O	General purpose I/O	
AD18	P0.22	Digital I/O	General purpose I/O	QSPI
AD20	P0.24	Digital I/O	General purpose I/O	
AD22	P1.00 TRACEDATA0	Digital I/O Trace data	General purpose I/O Trace buffer TRACEDATA[0]  Serial wire output (SWO)	QSPI
AD23	VDD	Power	Power supply	
Die pad	VSS	Power	Ground pad	

