

Arad BLE module selection guide

Nordic	nRF54L15			nRF52840			nRF52833		nRF52832		nRF52811		nRF52810	
Arad module P/N	MN54L-C15	MN54L-P15	MN54L-U15	MN52H-C40	MN52H-P40	MN52H-U40	MN52H-C33	MN52H-P33	MN52M-C32	MN52M-P32	MN52M-C11	MN52M-P11	MN52M-C10	MN52M-P10
Antenna type	Chip	PCB	u.FL	Chip	PCB	u.FL	Chip	PCB	Chip	PCB	Chip	PCB	Chip	PCB
CPU	Arm® Cortex®-M33,with FPU 128 MHz			Arm® Cortex®-M4 with FPU, 64 MHz						Arm® Cortex®-M4, 64 MHz				
GPIO	31			48			42		32		32			
Memory flash	1.5MB NVM			1MB			512KB		513KB		192KB			
Memory RAM	256KB			256KB			256KB		64KB		24KB			
Dimension	(L) 14.5 x (W) 9.3 x (H) 2.1			(L) 15.5 x (W) 10.1 x (H) 2.1					(L) 15.8 x (W) 9.0 x (H) 2.2					
Operating voltage	1.7 V to 3.6 V			1.7 V to 5.5 V					1.7 V to 3.6 V					
Operating temperature	-40° C to 85° C													
TX power（dBm）	+7dBm			-20 to +8dBm					-20 to +4 dBm					
Sensitivity @1Mbps BLE mode（dBm）	-96dBm			-95dBm			-96dBm							
RF Distance (open side) METERS	550m / 650m / 750m @ 1Mbps						550m / 650m @ 1Mbps		300m / 330m / 490m@1Mbps		350m / 380m @ 1Mbps			
Sensitivity @125k bps BLE mode (long range, dBm)	-104 dBm			- 103 dBm					-					
USB 2.0	-			√					-					
Protocol Support														
Bluetooth 6.0 Channel Sounding	√			-										
Bluetooth 5.4 PAwR	√								-					
BT MESH	√								-					
Matter	√			-										
Amazon Sidewalk	√						-							
Apple Find My	√								-					
Google Find My	√								-					
Thread / 802.15.4	√						-							
Zigbee / 802.15.4	√						-							
Direction Finding AOA/AOD	√			-			√		-		√		-	
ANT	√													
NFC	√										-			
2.4 GHz Proprietary	√													