

Operational Principle

1. CPU,HS6228 have an 8-bit microprocessor designed and developed with low-power and high-speed CMOS technology. Operation frequency is 3.5 MHz with internal RC oscillator., This chip is responsible to control RF-Baseband Transceiver(HS6228).
2. Matrix,8*18 matrix with eight input line and eighteen output line.
3. 2.4 GHz ISM Band Transceiver/Framer,HS6228 which is a low-cost,fully integrated CMOS radio frequency(RF) transceiver block,combined with a 64-byte buffered framer block.It contains transmit,receive,VCO and PLL functions,including an on-chip channel filter and resonator. It needs an external 16MHz crystal for reference frequency;
4. ANTENNA, The antenna is typically fed from the end of the monopole section by a plated through-hole via which is in turn connected to the RF output on the 2.4GHz band.
5. Voltage Range: DC 3V from battery

Channel list

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2402	11	2422	21	2442	31	2462
2	2404	12	2424	22	2444	32	2464
3	2406	13	2426	23	2446	33	2466
4	2408	14	2428	24	2448	34	2468
5	2410	15	2430	25	2450	35	2470
6	2412	16	2432	26	2452	36	2472
7	2414	17	2434	27	2454	37	2474
8	2416	18	2436	28	2456	38	2476
9	2418	19	2438	29	2458	39	2478
10	2420	20	2440	30	2460	40	2480

Note: the device has totally 40 channels, only 16 channels selected randomly from the channel list were active to transmit at same time.