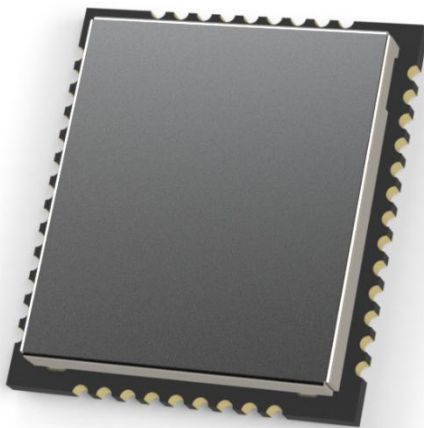


IPS T05 Datasheet V1.0



Content|目录

IPS T05 Datasheet V1.0	1
Content 目录	2
Disclaimer 免责声明	3
1. Introduction 介绍	4
2. Typical Specifications 典型规格	5
3. Product Structure 产品构造	6
4. Size 尺寸	7
5. Pin descriptions 引脚定义	8
6. Update Log 更新日志	10
7. Further Information 更多信息	11

Disclaimer|免责声明

Document Information 文档信息
Nooploop reserves the right to change product specifications without notice. As far as possible changes to functionality and specifications will be issued in product specific errata sheets or in new versions of this document. Customers are advised to check with Nooploop for the most recent updates on this product.
Nooploop 保留更改产品规格的权利，恕不另行通知。尽可能将改变的功能和规格以产品特定勘误表或本文件的新版本发布。建议客户与 Nooploop 一起检查了解该产品的最新动态。

Life Support Policy 生命保障政策
Nooploop products are not authorized for use in safety-critical applications (such as life support) where a failure of the Nooploop product would cause severe personal injury or death. Nooploop customers using or selling Nooploop products in such a manner do so entirely at their own risk and agree to fully indemnify Nooploop and its representatives against any damages arising out of the use of Nooploop products in such safety-critical applications.
Nooploop 产品未被授权用于失效的安全关键应用（如生命支持），在这种应用中，Nooploop 产品的故障可能会导致严重的人身伤害或死亡。以这种方式使用或销售 Nooploop 产品的 Nooploop 客户完全自行承担风险，并同意对 Nooploop 及其代表在此类安全关键应用中使用 Nooploop 产品所造成的任何损害给予充分赔偿。

Regulatory Approvals 管理批准
The IPS series, as supplied from Nooploop, has not been certified for use in any particular geographic region by the appropriate regulatory body governing radio emissions in that region although it is capable of such certification depending on the region and the manner in which it is used. All products developed by the user incorporating the IPS must be approved by the relevant authority governing radio emissions in any given jurisdiction prior to the marketing or sale of such products in that jurisdiction and user bears all responsibility for obtaining such approval as needed from the appropriate authorities.
由 Nooploop 提供的 IPS 系列尚未获得管理该地区无线电发射的适当监管机构的认证，但其能够根据该地区及其使用方式进行认证。用户开发的包含 IPS 的所有产品必须在该管辖区内销售或销售此类产品之前，由管理任何给定管辖区无线电排放的相关主管部门批准，并且用户应根据需要负责获得相关主管部门的批准。

1. Introduction|介绍

T05 是 IPS 室内定位系统中的一款被动标签，由 Nooploop 自主研发。T05 为模组形式结构，可集成于电路板上，主要应用于机器人定位场合。

2. Typical Specifications|典型规格

表 1: 规格参数

参数	T05
天线类型	外置天线
产品重量: g	1.3
天线重量: g	*
产品尺寸: mm	15.8*17.7*2.2
主体颜色	银色
外壳材料	白洋铜
通信接口	IO
供电:V	3.3V~5.2V
功耗	13mW
射频通道	CH5, CH9
中心频率: GHz	6.5, 8
频段: MHz	[6240,6739]@6.5GHz [7737,8236]@8GHz
可调发射功率: dBm/MHz	[-40.75,-14.43]@6.5G [-39.56,-23.91]@8G
通讯距离: m	空旷: 150@6.5G, 65&8G 工况: 75@6.5G, 30@8G
冷启动时间: s	1
工作温度	-20 ~ 70℃
存储温度	-40 ~ 85℃
工作湿度	10% ~ 90%无结霜
防护等级	*
交互	IO
蓝牙	BLE 5

3. Product Structure|产品构造

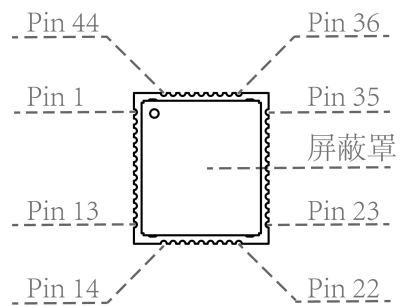


图 1: T05 构造示意图

4. Size|尺寸

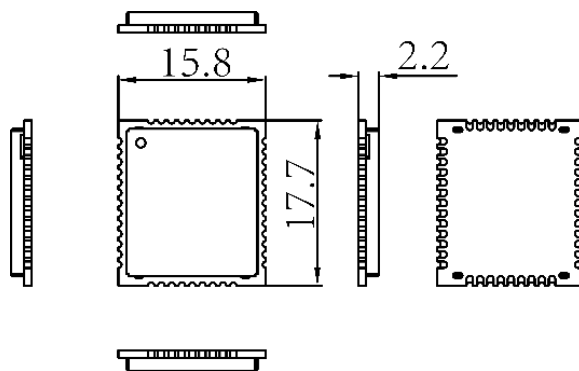


图 2: T05 尺寸图 单位: mm

5. Pin descriptions|引脚定义

表 2: 引脚定义

Pins	Pin Name	Main Function
1	GND	
2	BLE_ANT	BLE RF Pin
3	NC	
4	NC	
5	NC	
6	NC	
7	IO0	
8	IO1	
9	IO2	
10	NC	
11	NC	
12	NC	
13	NC	
14	NC	
15	RESET	System Reset
16	IO3	
17	RXD	UART RX
18	TXD	UART TX
19	IO4	
20	IO5	串口输出指示 H:Active
21	IO6	串口输入请求 H:Active
22	IO7	
23	IO8	
24	VDD_EXT	Reference logic level
25	IO9	
26	IO10	
27	GND	
28	IO11	
29	IO12	

30	NC	
31	NC	
32	NC	
33	NC	
34	GND	
35	UWB_ANT	UWB RF Pin
36	GND	
37	GND	
38	SWDIO	
39	SWCLK	
40	GND	
41	GND	
42	VBAT	Power In
43	VBAT	Power In
44	IO13	

6. Update Log|更新日志

表 3：更新日志

Version	Date	Description
1.0	20230717	● 发布初版手册

7. Further Information | 更多信息

公司：深圳空循环科技有限公司

地址：深圳市粤海街道科惠路 1 号沛鸿大厦 A2-207

邮箱：sales@nooploop.com

官网：www.nooploop.com