

开发板说明书

Development Board Instructions

☒初定规格 Preliminary specification

☐正式规格 Official specifications

项目编号 Project No.	HTM-EzUIX1-DEMO-A01_V1
产品描述 Product Description	Development Board
客 户 确 认 签 章: Signature by customer:	
 ☒小批量试产 Trial Production ☐大批量生产 Mass Production 请返回一份带有您的签名和评论的确认副本 Please return one copy confirmation with signature and your comments	

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一、产品介绍 Product Introduction

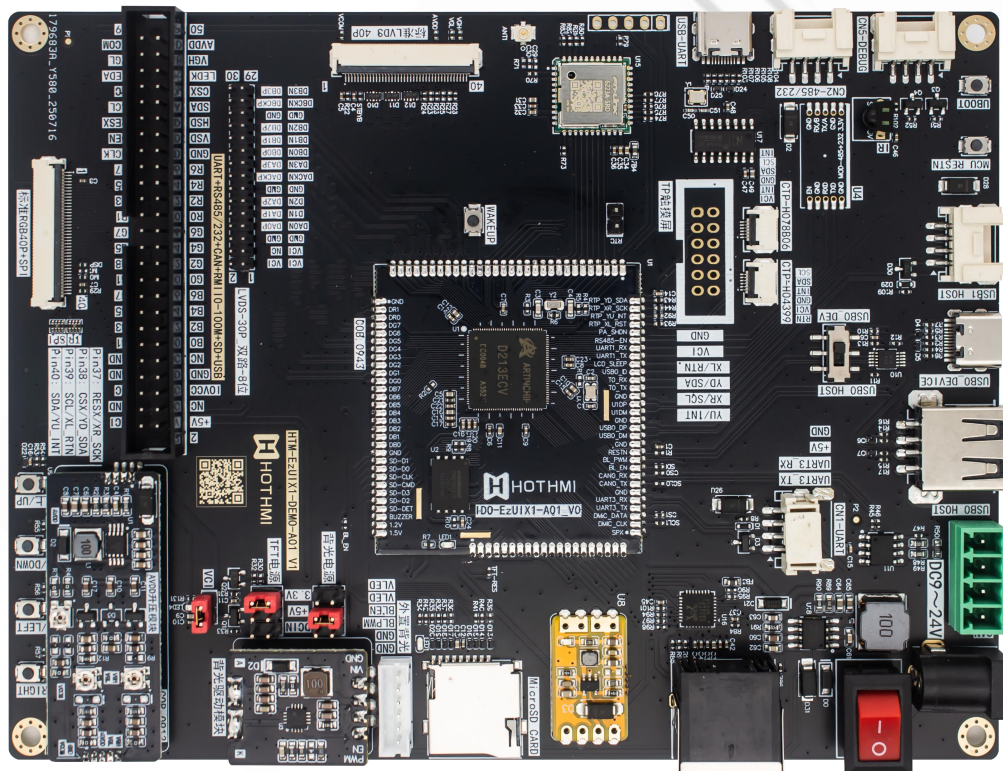
HTM-EzUIX1-DEMO-A01 是一款基于 Artinchip D213 的高性能工业开发板，集成了国产自主高性能 MCU，支持丰富的人机交互接口，高度集成 USB2.0，板上包含 MIPI-DSI、LVDS、RGB24Bit 等显示屏接口，具有强大的 2D 图形加速引擎，此外支持 SPI、I2C、PWM、RMT、CAN、UART、RS485/232 等常用外设，支持各种通讯协议，可以满足各类交互设计场景和多媒体互动体验。板上芯片支持数字签名安全启动方式，确保数据和操作的安全性。HTM-EzUIX1-DEMO-A01_V0 专为高性能和高安全应用设计，满足嵌入式系统在人机交互、边缘计算、IO 扩展等方面的需求，可广泛面向于工业领域应用。

- 搭载国产 64 位单核 RISC-V 高性能 MCU，主频可达 600MHz
- 搭载 6233A-SRB WiFi 模块，通过 SDIO2.0 通讯，支持 5G WiFi 和 BT5.2
- 可用存储 32KB BROM、96KB SRAM、512MB DDR2 和 1Gbit Nand Flash
- 支持 SDIO2.0 存储接口，可挂载大容量 SD Card
- 强大的 2D 图像处理能力，全高清 JPEG/H.264 解码引擎，配备丰富的显示接口
- 板上集成 RGB、LVDS、MIPI 等显示屏接口和电容触摸功能，最高性能 1080P@60fps
- 板上集成背光驱动模块，最大输出 25V/200mA，可驱动高亮显示屏背光
- 板上引出 SPI、I2C、USB、UART、RS485/232、CAN 等外设接口，可实现多种通讯协议
- 板上引出一路 GMAC 以太网接口，支持 100M RMII/1000M RGMII，支持 IEEE1588 协议
- 支持 USB MSC，可通过 U 盘进行 FLASH 固件升级

HTM-EzUIX1-DEMO-A01 is a high-performance industrial development board based on Artinchip D213, integrating a domestically developed high-performance MCU. It supports a rich variety of human-machine interaction interfaces and is highly integrated with USB2.0. The board includes MIPI-DSI, LVDS, RGB24Bit and other display interfaces, and features a powerful 2D graphics acceleration engine. Additionally, it supports common peripherals such as SPI, I2C, PWM, RMT, CAN, UART, RS485/232, and various communication protocols, meeting the requirements of various interactive design scenarios and multimedia interaction experiences. The on-board chip supports secure boot with digital signature, ensuring the security of data and operations. HTM-EzUIX1-DEMO-A01 is specifically designed for high-performance and high-security applications, meeting the demands of embedded systems in human-machine interaction, edge computing, IO expansion, and other aspects. It can be widely applied in industrial fields.

- Equipped with a domestic 64-bit single-core RISC-V high-performance MCU, with a main frequency up to 600MHz
- Equipped with the 6233A-SRB WiFi module, it communicates via SDIO2.0 and supports 5G WiFi and BT5.2
- Available storage: 32KB BROM, 96KB SRAM, 512MB DDR2 and 1Gbit Nand Flash
- Supports SDIO2.0 storage interface and can mount large-capacity SD cards

- Powerful 2D image processing capability, full HD JPEG/H.264 decoding engine, equipped with rich display interfaces
- The board integrates display interfaces such as RGB, LVDS, MIPI, and capacitive touch function, with the highest performance 1080P@60fps
- The board integrates a backlight driver module with a maximum output of 25V/200mA, which can drive the backlight of high-brightness display screens
- The board is equipped with peripheral interfaces such as SPI, I2C, USB, UART, RS485/232, and CAN, enabling multiple communication protocols
- One GMAC Ethernet interface is led out from the board, supporting 100M RMII/1000M RGMII and the IEEE1588 protocol
- Supports USB MSC, and FLASH firmware upgrade can be performed via a USB flash drive

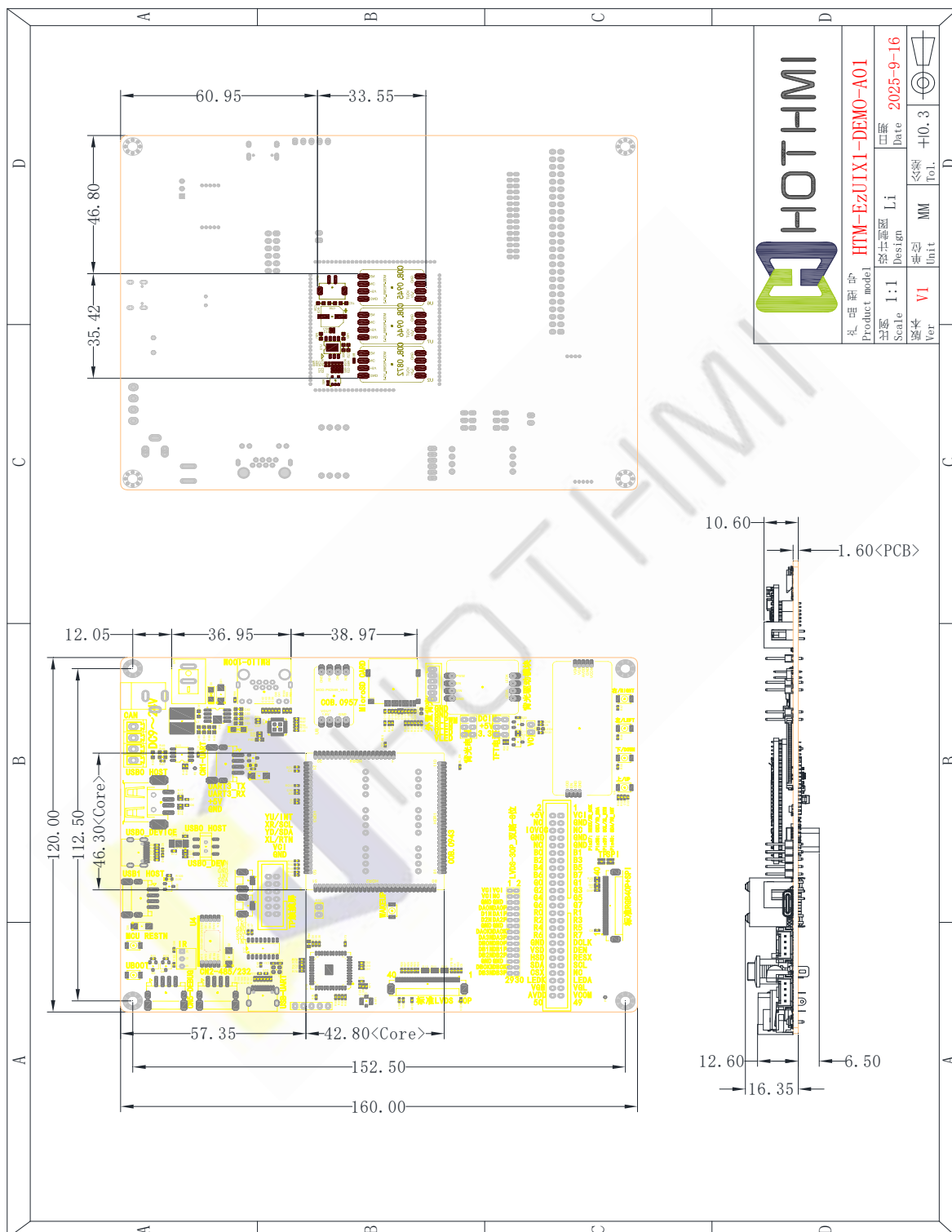


二、主要参数 Main Parameters:

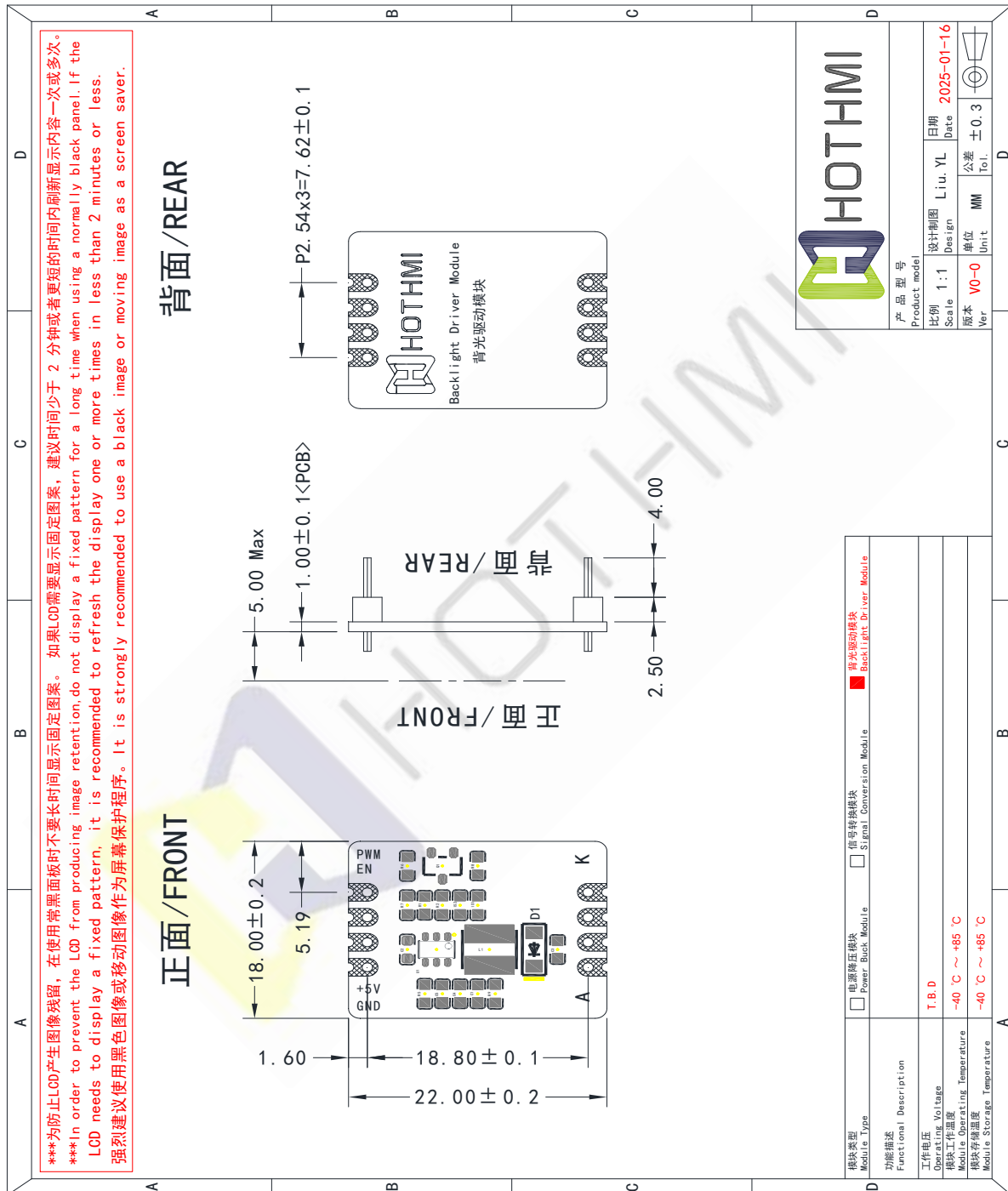
项目 Item	标准值 Standard Value			单位 Unit
主控芯片 Main Control Chip	Artinchip D213			-
编程平台 Programming Platform	Luban(Linux) Luban-lite(Windows)			-
固件下载方式 Firmware Download Method	USB Flash			-
存储器类型/大小 Flash type/size	Nand-Flash/1Gbit			-
外形尺寸 Outside Dimensions	120.0 x 160.0 x 19.1			毫米 mm
供电方式 Power Supply	USB-5 DC-9~24			伏特 V
支持显示屏接口 Support Display Interface	RGB 24Bit Interface LVDS Interface MIPI Display Serial Interface (4 LANE)			-
工作温度 Operating Temperature	-20.0 ~ 85.0			摄氏度 ℃
最小工作电流 Minimum operating current	100			毫安 mA
支持存储设备 Support Storage Device	☐ 不支持 Not Supported	☒ SD 卡 SD Card	☒ U 盘 U Disk	-

说明 Description:

三、外形尺寸 Outline Dimensions



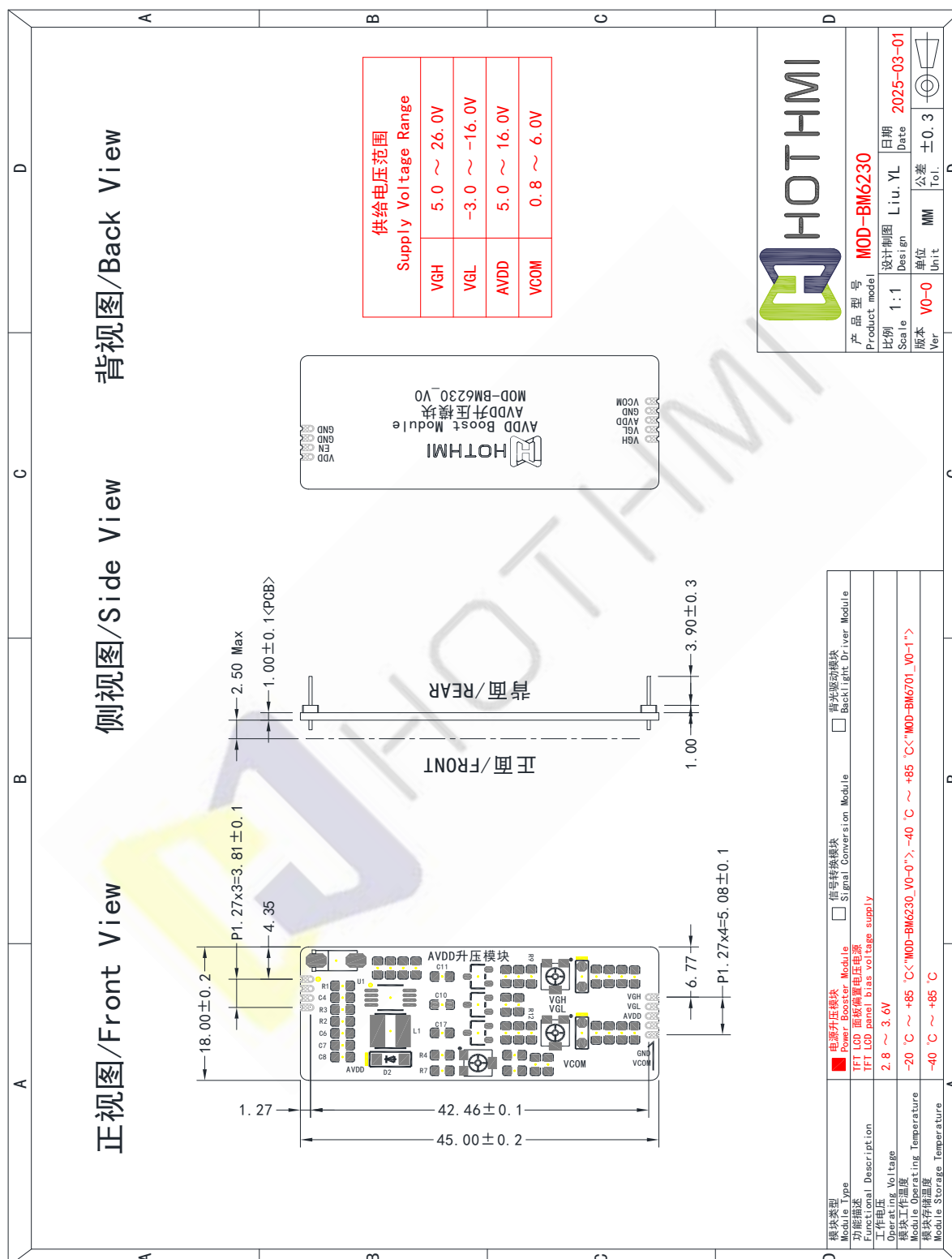
四、外部模块 Extern Module



背光模块尺寸 Backlight Module Dimensions

说明 1: 我司所有背光模块长，宽尺寸相同，引脚定义相同。使用的模块以实物为准。

Note 1: All of our backlight modules have the same length and width dimensions and the same pin definition. Modules used are subject to physical.



AVDD 升压模块尺寸

AVDD Boost Module Dimensions

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文档修订记录 Document revision history :

版本 Version	日期 DATE	修改说明 Modify description	编著 Editorial
0-0	2025-09-16	初次编制 First compilation.	Li

— — 结束 — —
— — END — —