

万物静息鸿蒙里，开源放量百花开(In the Quiet Cosmos, Open Source Thrives with a Volume Increase)

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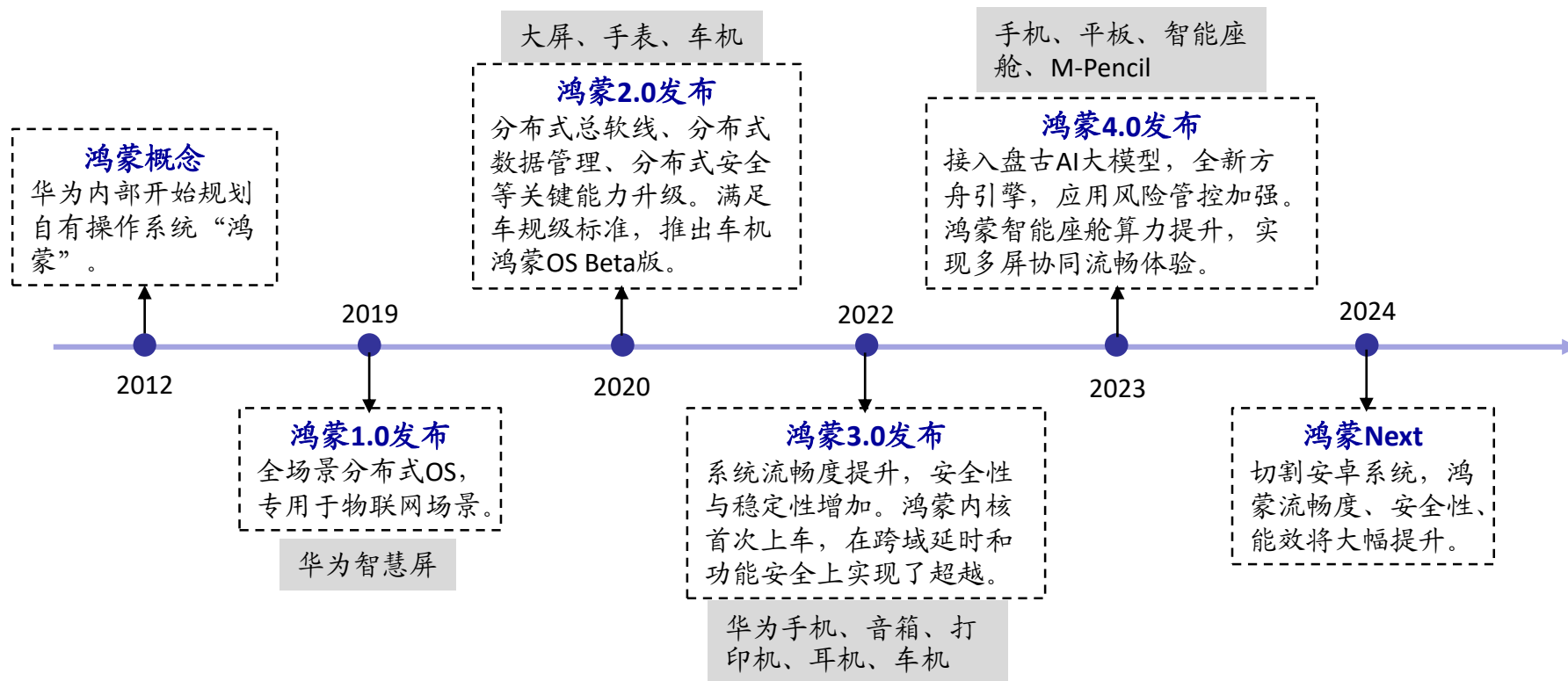
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1. HarmonyOS为万物互联而生
2. OpenHarmony促进系统落地千行百业
3. 鸿蒙OS与开鸿打通，终端放量在即
4. 鸿蒙生态首批受益标的盘点

1.HarmonyOS为万物互联而生

自2019年起，华为移动通信相关产品加速国产化替代进程。同时，随着万物互联时代的到来，IOT设备数量急剧增加，对分布式开发需求提出了新的挑战。在此背景下，华为加速推出了自主研发的操作系统——鸿蒙OS，旨在顺应万物互联时代的需求，推动操作系统国产化进程，实现科技自主可控。

图1: 鸿蒙OS发展历程, 5年更新4代

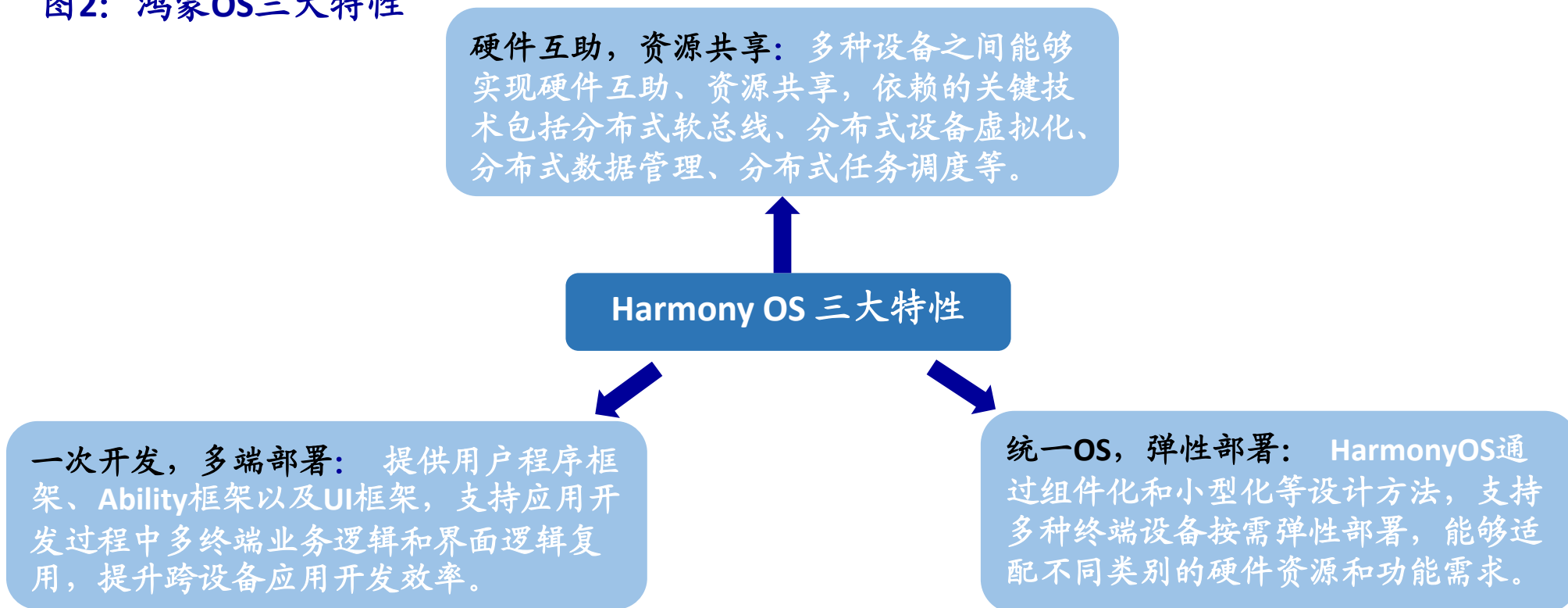


1.HarmonyOS为万物互联而生

为满足全场景智慧体验的高标准的连接要求，鸿蒙OS确立了三大技术特性：

- ✓ 硬件互助，资源共享
- ✓ 一次开发，多端部署
- ✓ 统一OS，弹性部署

图2：鸿蒙OS三大特性



1.HarmonyOS为万物互联而生

华为鸿蒙为自己定下了16%全球市占率的生死线，只有保持在这个数据以上才能保持竞争力。根据CounterPoint数据，截至2023Q3，鸿蒙OS全球智能手机市占率为3%，国内智能手机市占率为13%，几乎追平IOS在国内的市占率。考虑所有搭载操作系统的移动设备，根据DemandSage数据，2023年活跃的安卓系统设备数为33亿，苹果官方表示2023年全球活跃苹果设备数达20亿。2024月1月，余承东在鸿蒙千帆启航仪式上表示，鸿蒙设备数已达到8亿以上。由此推算，鸿蒙全球市占率至今已达13.11%，与16%生死线已十分接近。

图3: 全球智能手机操作系统市占率

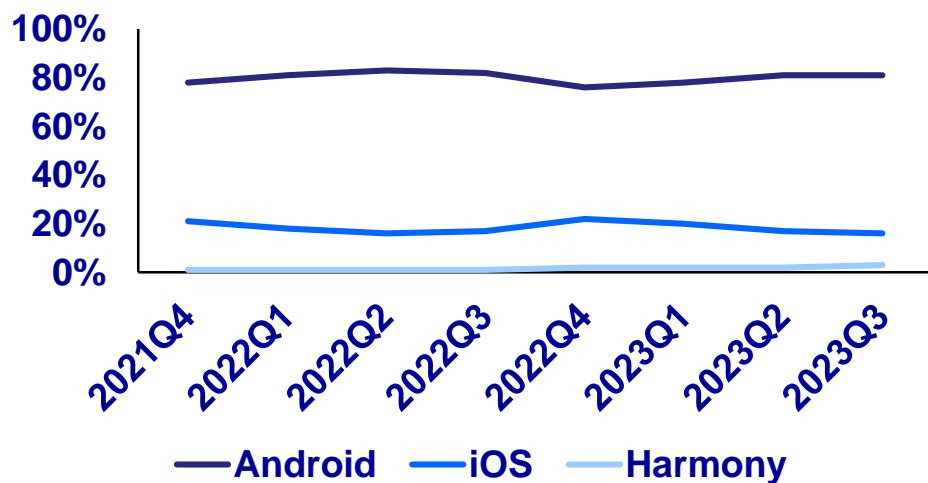
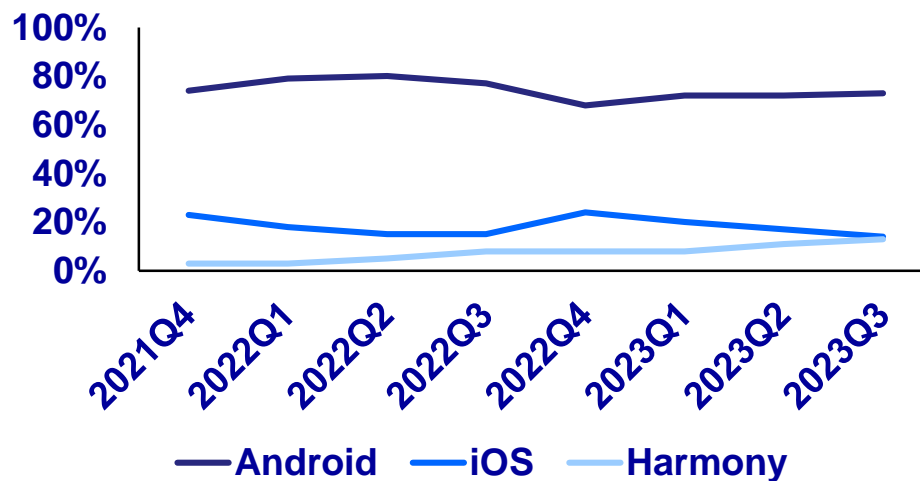


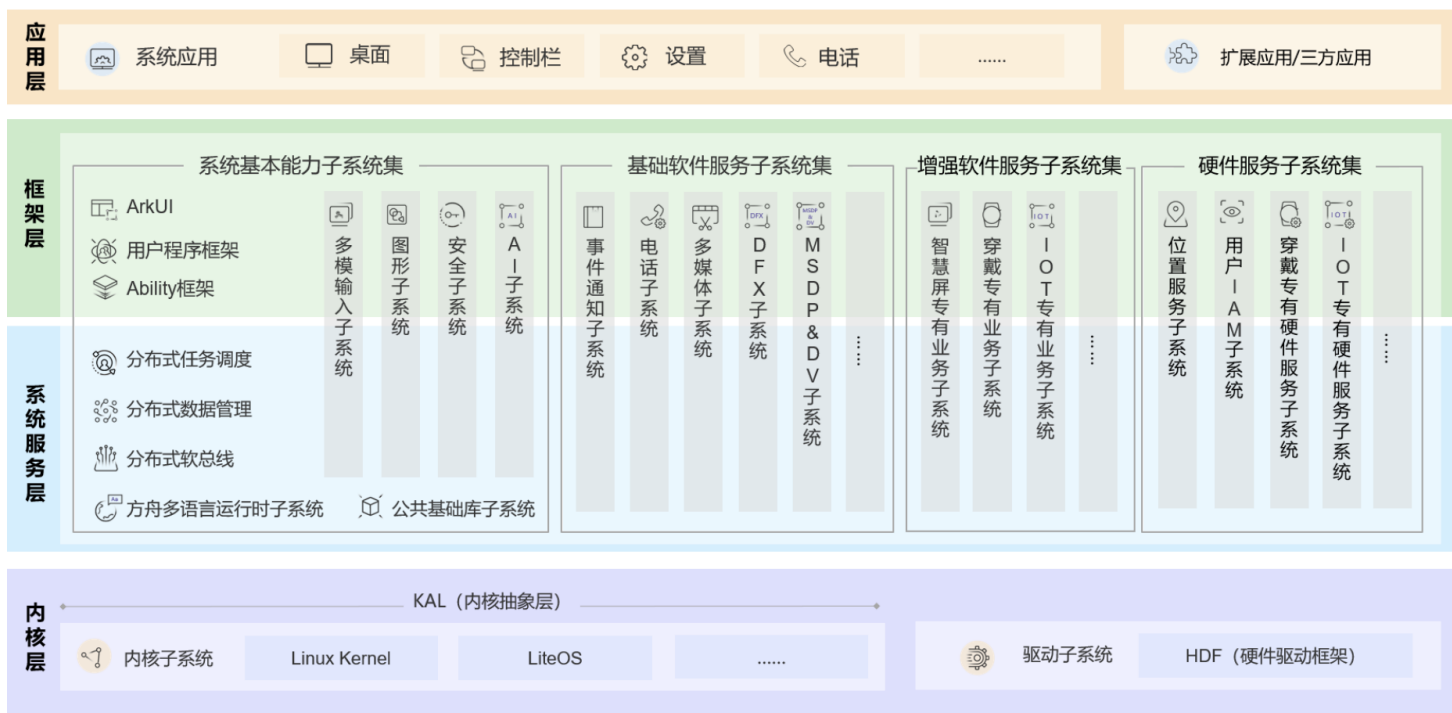
图4: 中国智能手机操作系统市占率



2.OpenHarmony促进鸿蒙落地千行百业

2020年9月，华为将鸿蒙系统代码捐赠给开放原子开源基金会并开始孵化成为开源鸿蒙。除了具备鸿蒙OS的基本特性外，OpenHarmony能做到硬件资源的可大可小，在多种终端设备间接需弹性部署。OpenHarmony整体遵从分层设计，从下向上依次为：内核层、系统服务层、框架层和应用层。系统功能按照“系统>子系统>组件”逐级展开，在多设备部署场景下，支持根据实际需求裁剪某些非必要的组件。

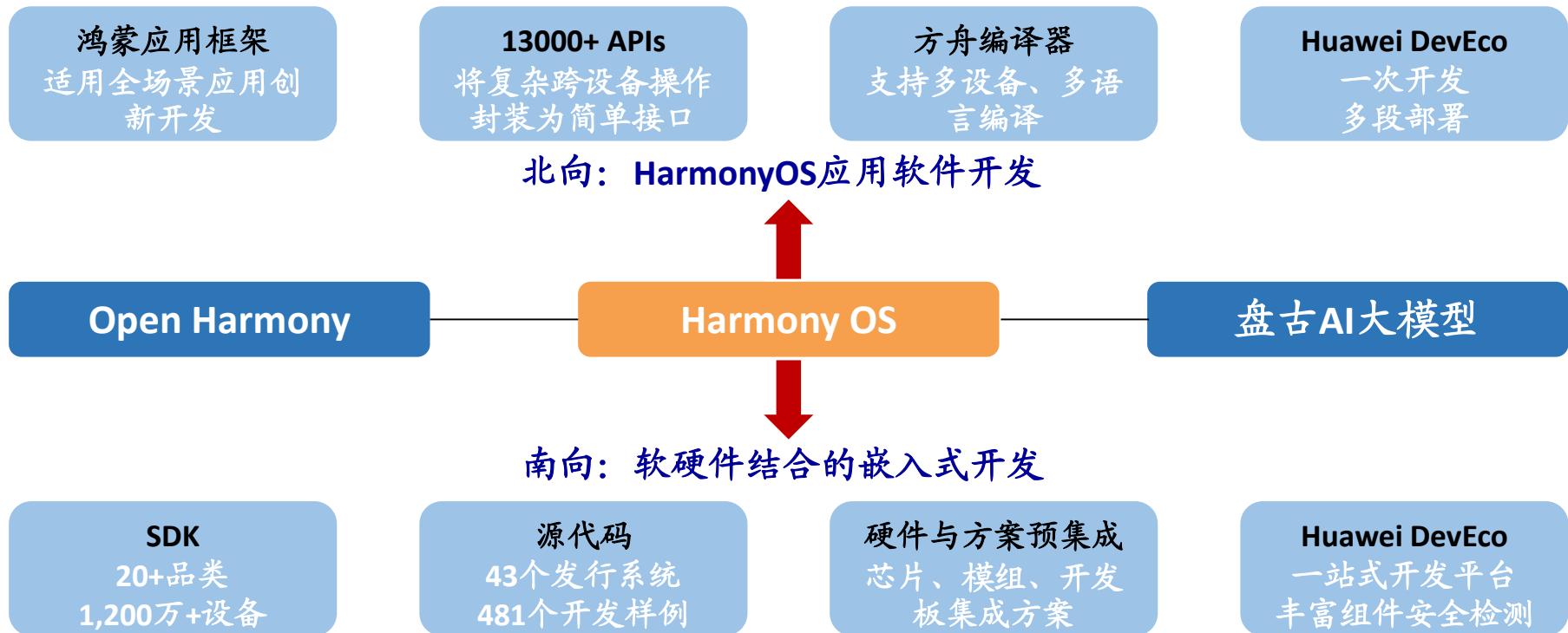
图5: OpenHarmony技术架构



2.OpenHarmony促进鸿蒙落地千行百业

华为只做C端鸿蒙（Harmony OS），B端由合作伙伴利用OpenHarmony完成。因此，双方兵分两路，鸿蒙OS主打“1+8+N”战略，实现全场景终端互联。开源鸿蒙面向行业垂直领域，南向渗透嵌入式硬件，北向推动配套商业软件开发，使鸿蒙得以同时在更多的行业领域铺开落地，构建鸿蒙生态圈。

图6：鸿蒙南北向发展路线



2.OpenHarmony促进鸿蒙落地千行百业

据OpenHarmony社区月度运营报告，2023年11月，社区累计超过6200名贡献者产生24.4万多个合并请求，2.3万多个点赞，6.2万多个克隆，59个特别兴趣小组。新增13款产品，累计已有165个厂家的447款产品通过兼容性测评，覆盖金融、教育、交通、能源、政务、安平、制造、卫生、广电、电信等领域，成为万物互联的数字底座，赋能千行百业。

图7：2023年2月-11月社群沉淀开发者数量

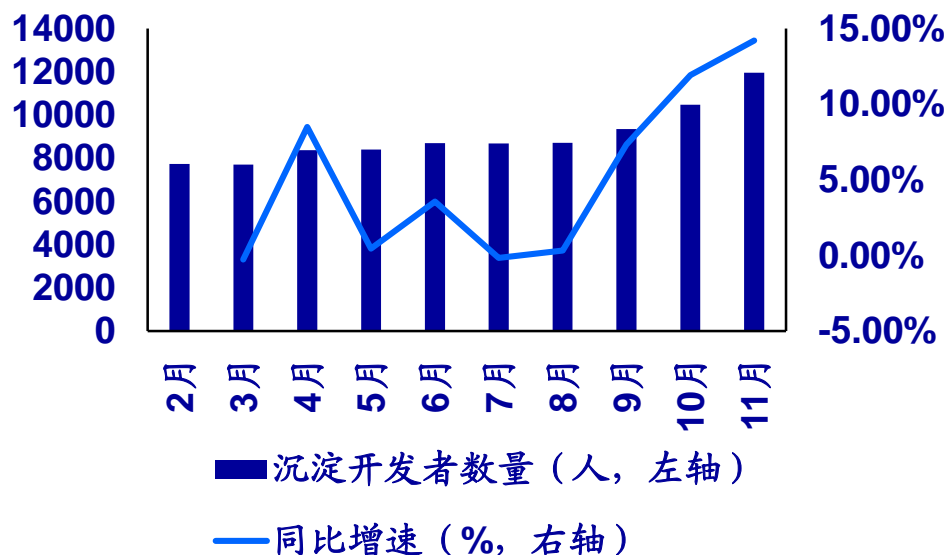
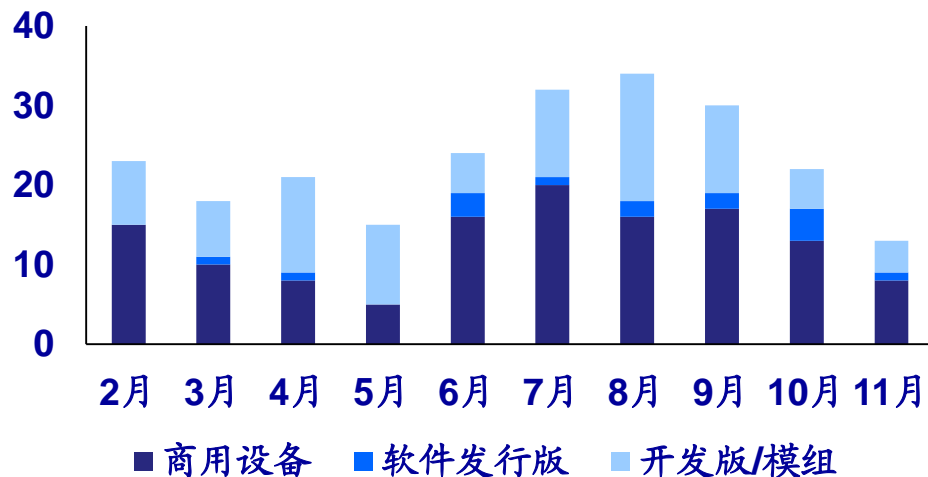


图8：2023年2月-11月测试通过产品数量变化（款）



2.OpenHarmony促进鸿蒙落地千行百业

电力行业痛点：电力系统装置大量使用基于Linux的发行版操作系统，这些系统设计复杂，可靠性相对较低；同时，当前电网，设备种类多、系统不统一、数据难互通，导致升级、运维在特定场景可能存在困难。

鸿蒙解决方案：2023年10月31日，国内首个电力物联操作系统电鸿OS发布，实现一套系统覆盖不同类型、不同品牌的电力设备，设备即插即用、海量数据互联互通，为未来新型电力系统大规模物联设备接入、运行维护提供了电力物联操作系统。

图9：OpenHarmony输电线路解决方案与传统方案对比

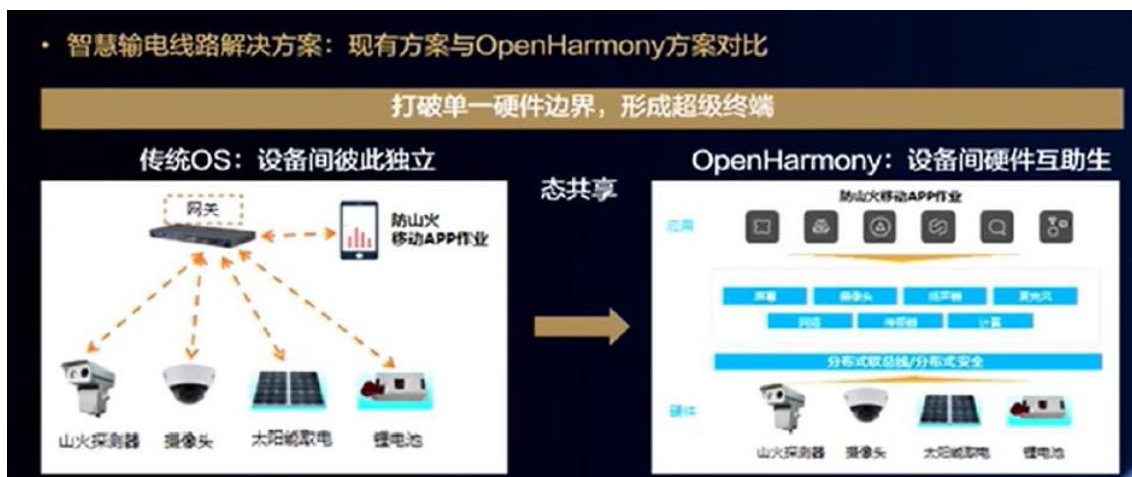


图10：电鸿OS相关硬件产品



2.OpenHarmony促进鸿蒙落地千行百业

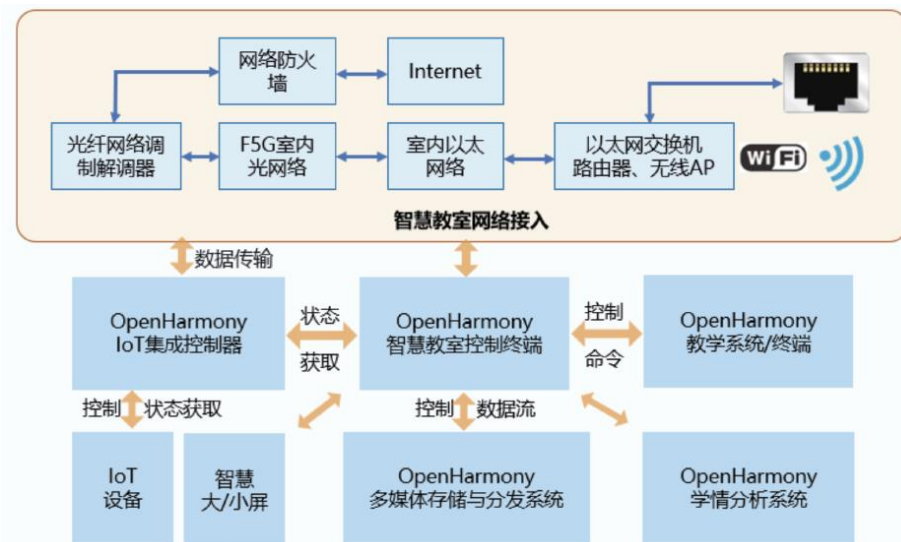
智慧教育装备行业痛点：智慧教室里设备终端之间的互联互通极其不便，硬件方面必须安装辅助的互联互通的设备，软件方面需要安装支持互联互通的协议。

鸿蒙解决方案：OpenHarmony为硬件设备、系统厂商，提供不同硬件参数配置的适配。以OpenHarmony作为核心，可以打通家庭、校园与社会的应用场景，支持家校社的全面链接，轻松实现资源共享、可视化交互、教师研修等。

图11: 智慧教育装备领域的应用场景



图12: 智慧教室总体设计方案



3.鸿蒙OS与开鸿打通，终端放量在即

自3.1版本起，HarmonyOS搭载的方舟编译器支持OpenHarmony的API9，同一个应用程序可以同时HarmonyOS与OpenHarmony上运行，C端与B端鸿蒙生态被正式打通。C端生态的完善将带动B端鸿蒙的发展。2023年12月，华为应用市场上线鸿蒙先锋应用专区，截至2024年1月已有约150款应用启动或完成鸿蒙原生应用开发。2024年1月2日，拥有3亿用户的中国移动宣布开启鸿蒙原生应用开发，为鸿蒙系统带来了更大的用户渗透入口。

图13: 已开启鸿蒙原生应用开发的部分APP



3.鸿蒙OS与开鸿打通，终端放量在即

2024年1月15日，HarmonyOS NEXT开发者预览版首批Beta招募开启。1月18日，华为举行鸿蒙千帆启航仪式，宣布HarmonyOS Next鸿蒙星河版开发者预览面向开发者开放申请。该版本将彻底切割安卓底层，预示着HarmonyOS进入第二阶段，开始全面推进商业化进程，并带动OpenHarmony产品放量。根据OpenHarmony项目群工作委员会代表柳晓见，OpenHarmony操作系统参与的市场空间约1000亿人民币，通过OpenHarmony撬动的行业设备及服务的空间将达到1万亿人民币，预计未来5年至少将有10亿+的装机量。

图14：华为期待携手更多开发者加速千行百业应用鸿蒙化



3.鸿蒙OS与开鸿打通，终端放量在即

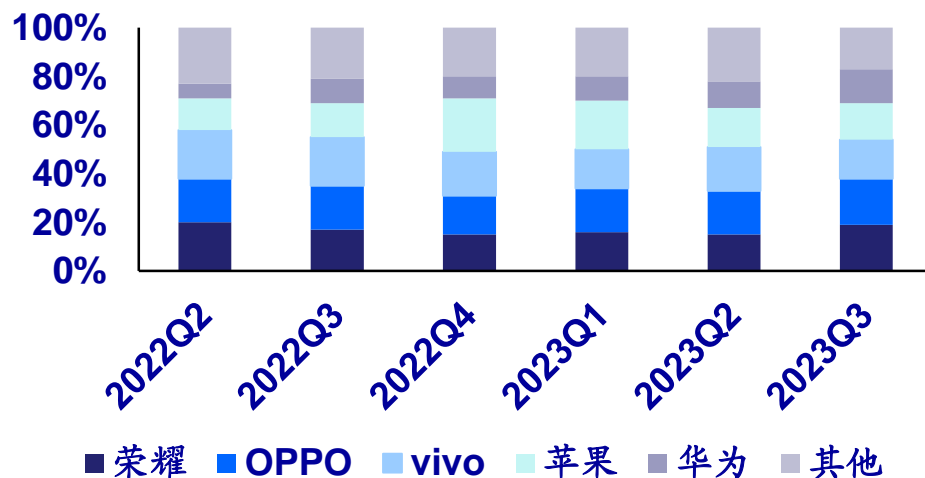
HarmonyOS将按照华为提出的“1+8+N”战略在C端市场铺开，凭借C端消费电子的庞大基数提升鸿蒙系统市占率，促进大鸿蒙生态形成，随后带动B端行业类商用软硬件市场扩张。

“1”手机：华为手机市占率在2020H2出现明显缩水，我们认为主要受美国制裁以及与荣耀分家的影响。但自2023年来，华为手机在国内的市占率显著回暖。据CounterPoint数据统计，2023年Q3华为手机在国内的市占率达14%，相较2022年Q3时10%的市占率，YoY高达40%。我们认为，随着华为自研手机芯片、系统投产，制裁影响逐步减小，华为手机销量有望重回巅峰。

图15: HarmonyOS “1+8+N” 发展战略



图16: 2022Q2-2023Q3中国智能手机市场份额



资料来源: 51CTO, CounterPoint, HTI

3. 鸿蒙OS与开鸿打通，终端放量在即

“8” 平板、PC、VR、可穿戴设备、智慧屏、智慧音频、智能音箱、车机：相较于安卓（手机、平板）、iOS系统（手机、平板、PC、手表），华为鸿蒙OS在8种消费终端同步布局，且产品市占率均可观且未来具备庞大市场空间。据Canalys数据，华为平板电脑2023Q3国内市占率达24%，排名第二；华为PC电脑2023Q3国内市占率为9%，排名第三，且针对PC的盘古M900已通过测试，有望突破英特尔芯片垄断；据CounterPoint数据，华为智能手环2023Q3全球市占率达10%，排名第三。

图17: 2022Q2-2023Q3中国平板电脑市场份额

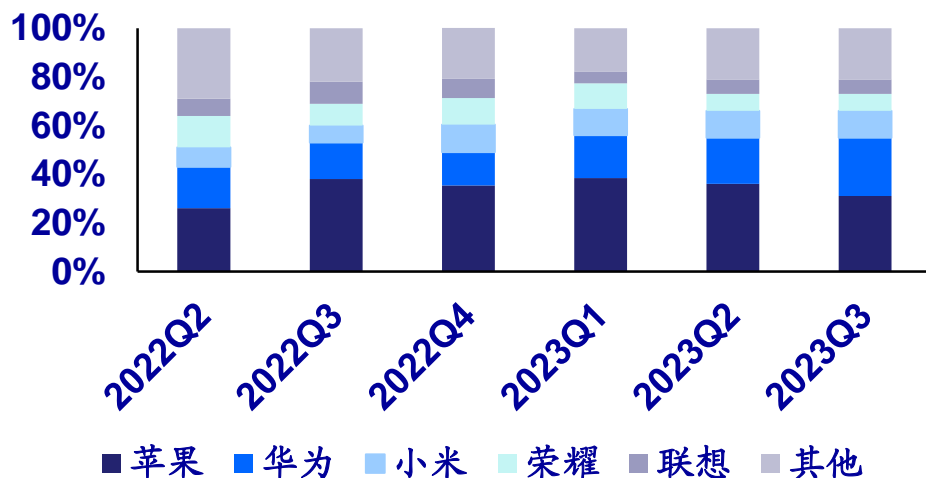
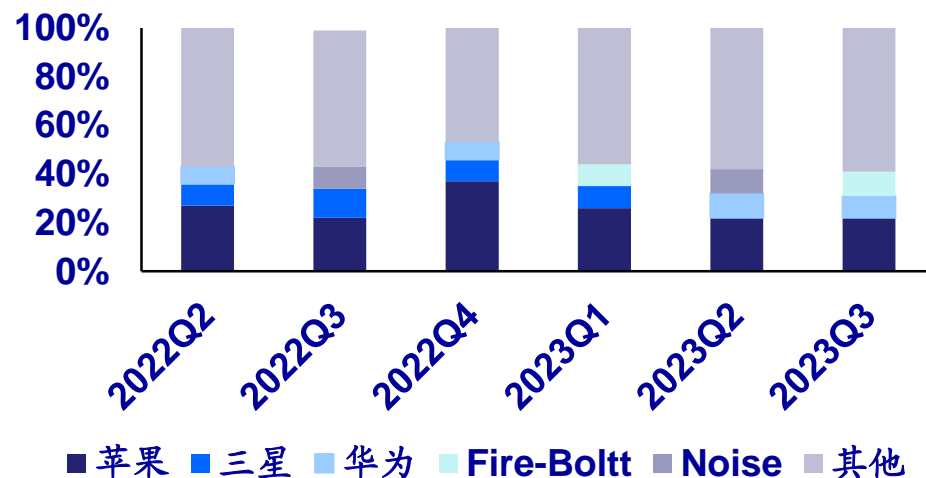


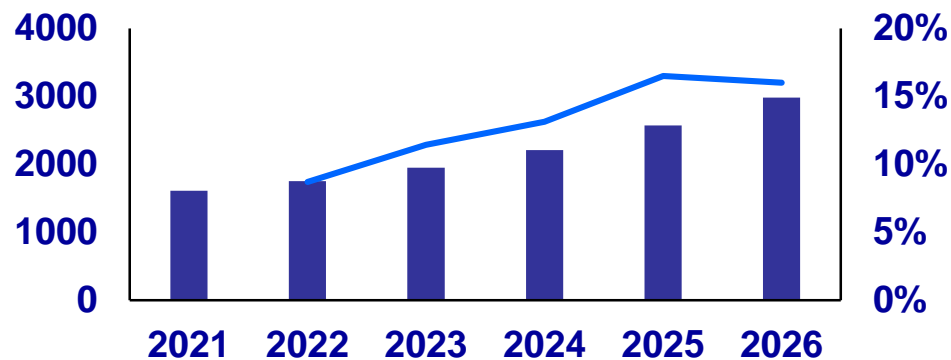
图18: 2022Q2-2023Q3全球智能手环市场份额



3.鸿蒙OS与开鸿打通，终端放量在即

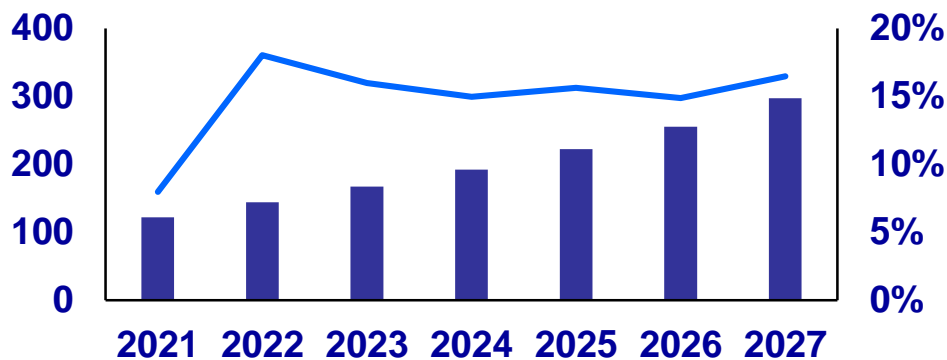
“N”：泛IOT设备，根据IDC的预测，中国物联网支出规模将在2026年达到3000亿美元，届时将位居全球第一。根据IoT Analytics统计，中国物联网设备数量将在2027年前达到297亿。而华为对HarmonyOS的定位即是“万物互联时代最强大的操作系统”，与环境具有很强的适配性。同时，华为通过OpenHarmony广泛结盟鸿蒙生态圈伙伴，合作伙伴可着力推进华为自身业务覆盖不到的硬件终端。

图19: 2021-2026中国物联网市场支出预测



■ 物联网支出 (亿美元, 左轴) — yoy (% , 右轴)

图20: 2021-2026中国物联网设备数预测



■ 物联网设备数 (亿台, 左轴) — yoy (% , 右轴)

4. 鸿蒙生态首批受益标的盘点

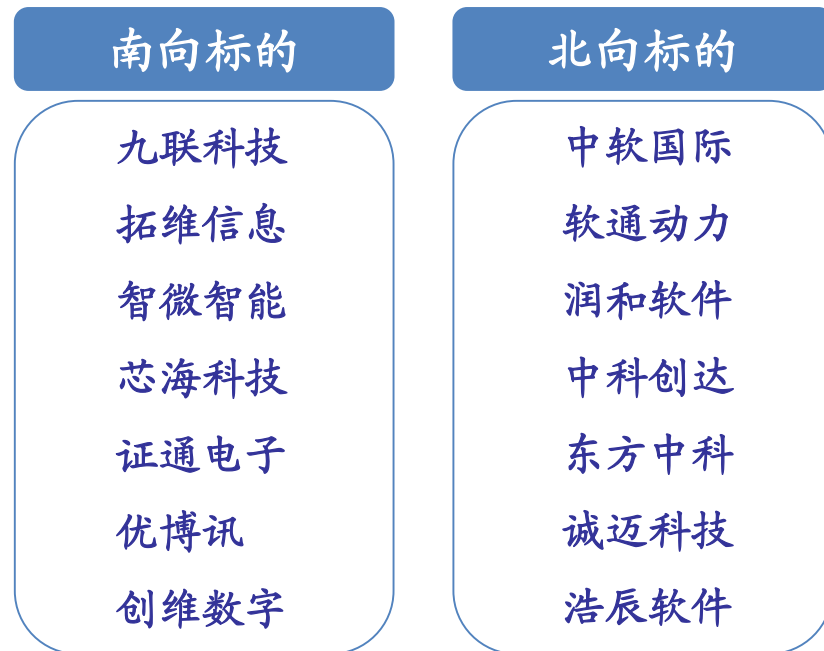
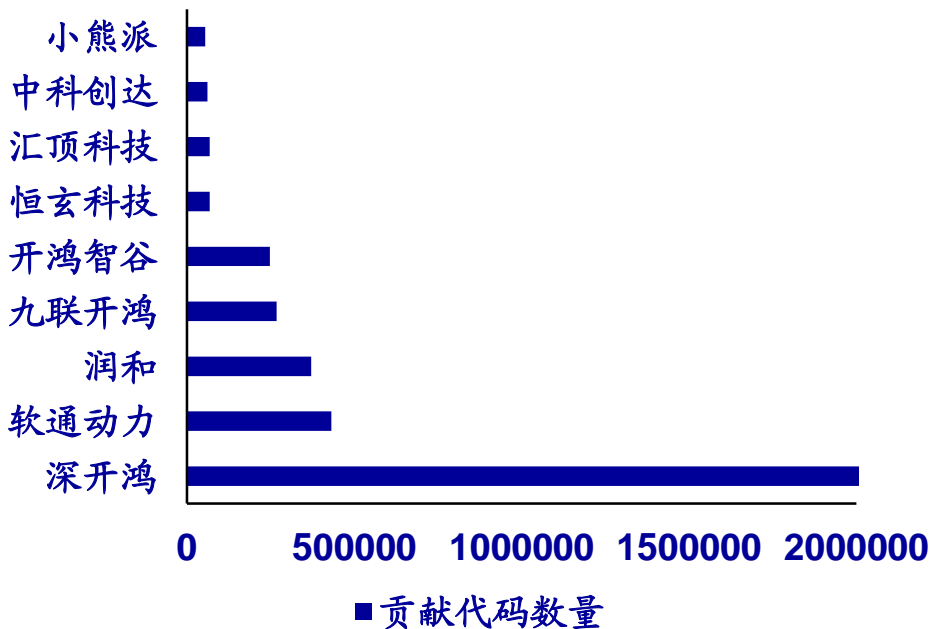
华为鸿蒙深度合作伴：开源鸿蒙社区共建工作量前10，包括中软国际、软通动力、润和软件、拓维信息、九联科技、中科创达等。

细分垂直领域鸿蒙软件开拓者：相对第一类企业起步晚，但相对行业其他单位领先，且行业具有较大市场，如东方中科、智微智能、芯海科技、优博讯、诚迈科技、证通电子、浩辰软件、创维数字。

直接或间接受益于鸿蒙终端放量：智度股份、蜂助手

图21: 截至2024.1.22开鸿代码增加排行榜前十

图22: 受益标的的南北向分布



资料来源: OpenHarmony官网, 各大公司官网, HTI

4. 鸿蒙生态首批受益标的盘点

产品通过OpenHarmony认证数量排名与代码量排名基本一致：中软国际/深开鸿41款、九联科技/九联开鸿37款、润和软件/润开鸿27款、诚迈科技18款、拓维信息/开鸿智谷15款、软通动力/鸿湖万联14款、证通电子14款。

表1: 截止2024年3月21日 OpenHarmony已认证产品排行榜

OpenHarmony已认证产品数一览 (单位: 款)											
公司名称	代码	轻量系统		小型系统		标准系统		硬件合计 (南向)	软件发行版 (北向)	合计	百人代码贡献 单位
		模组/开发板	商用设备	模组/开发板	商用设备	模组/开发板	商用设备				
中软国际/深开鸿	00354.HK	8	4	0	0	5	19	36	5	41	是
九联科技/九联开鸿	688609.SH	21	2	1	8	1	3	36	1	37	是
润和软件/润开鸿	300339.SZ	8	0	2	1	6	1	18	9	27	是
诚迈科技	300598.SZ	7	0	0	0	1	8	16	2	18	否
拓维信息/开鸿智谷	002261.SZ	5	6	0	0	0	2	13	2	15	是
软通动力/鸿湖万联	301236.SZ	4	0	1	0	4	2	11	3	14	是
证通电子	002197.SZ	0	2	0	0	1	9	12	2	14	否
新大陆	000997.SZ	0	4	0	3	1	2	10	0	10	否
星网锐捷/升腾资讯	002396.SZ	0	5	0	1	2	4	12	1	13	否
中科创达/奥思维	300496.SZ	1	0	0	0	5	2	8	1	9	否
联迪信息	839790.BJ	0	6	0	0	0	3	9	0	9	否
东方中科/万里红	002819.SZ	0	0	0	0	0	2	2	3	5	否
新国都	300130.SZ	0	3	0	0	0	1	4	0	4	否

4. 鸿蒙生态首批受益标的盘点

中软国际是首家鸿蒙智联生态的使能服务商，早在2012年就参与鸿蒙项目的研发合作。其子公司深开鸿是华为哈勃持股的第一家生态合作伙伴公司（哈勃持股20%），2021年成为开放原子开源基金会白金捐赠人，OpenHarmony开源项目B类捐赠人。在OpenHarmony主仓代码贡献量在华为以外的生态厂商中位居第一，垂类行业覆盖制造业、交通、基建、康养、教育。

图23: 深开鸿股权穿透图

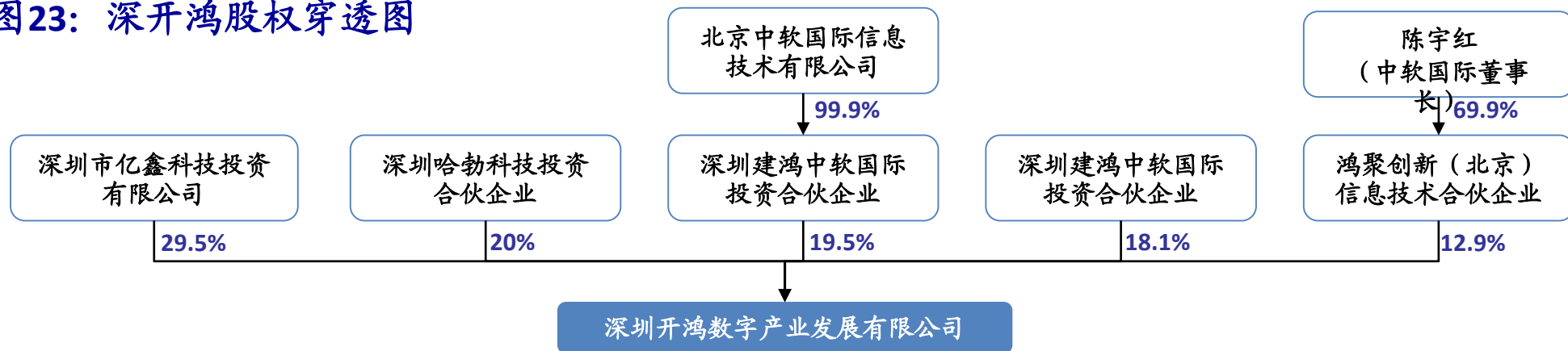


图24: KaihongOS产品矩阵



4. 鸿蒙生态首批受益标的盘点

软通动力与华为合作历史悠久，早在2017年就已成为华为首批同舟共济合作伙伴。开源鸿蒙方面，其子公司鸿湖万联是华为哈勃持股的第二家生态合作伙伴公司（哈勃持股5%），在OpenHarmony主仓代码贡献量在华为以外的生态厂商中位居前三，率先完成鸿蒙适配PC，先后发布“扬帆”、“启航”、“启鸿”开源鸿蒙开发套件，应用场景覆盖教育、交通、餐饮、医疗、零售等行业。

图25: 鸿湖万联股权穿透图

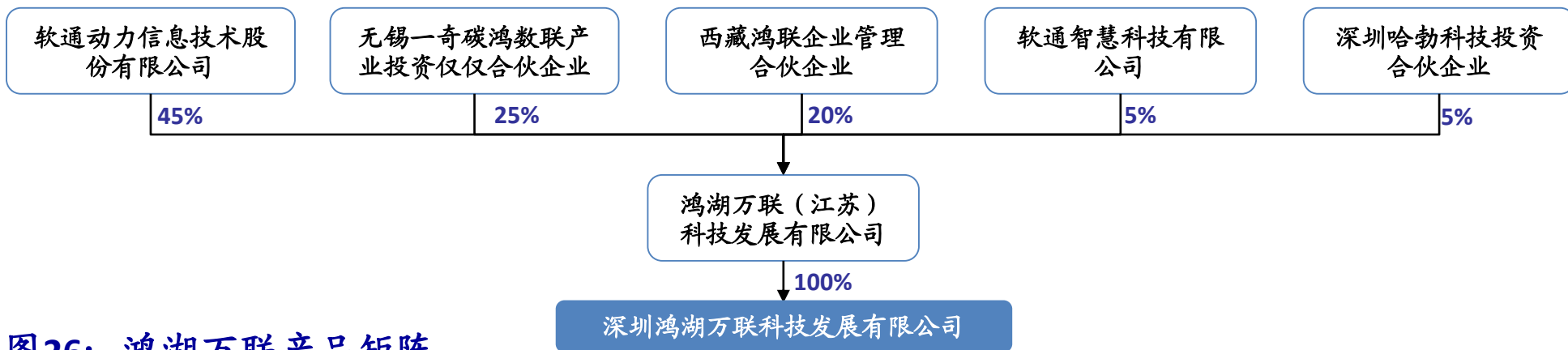


图26: 鸿湖万联产品矩阵



资料来源：天眼查，鸿湖万联官网，HTI

请务必阅读正文之后的信息披露和法律声明

4. 鸿蒙生态首批受益标的盘点

润和软件、与旗下子公司润开鸿常居OpenHarmony代码贡献Top3，子公司润开鸿在成立之初便确立了“1+2+N”业务战略，即“基于1个OpenHarmony技术底座，深耕金融、能源2大优势行业，赋能智慧城市、医疗、工业、教育等千行百业”。润开鸿业务包括从芯片适配、模组、板卡、应用开发到上云的一站式“软+硬+云”整体方案，现已有5款HiHopeOS软件通过兼容性测试。

图27: 润开鸿股权穿透图

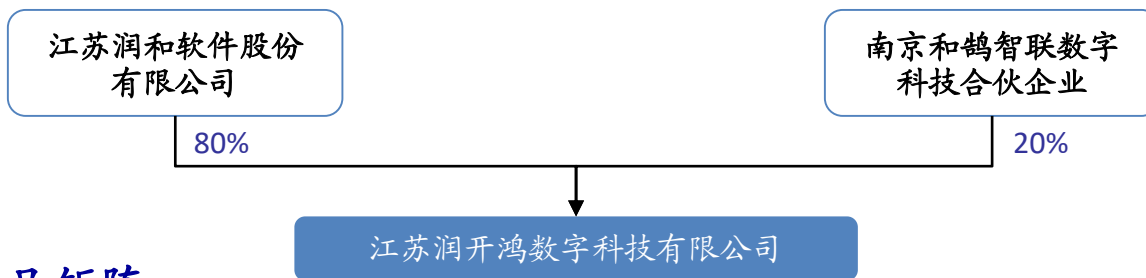
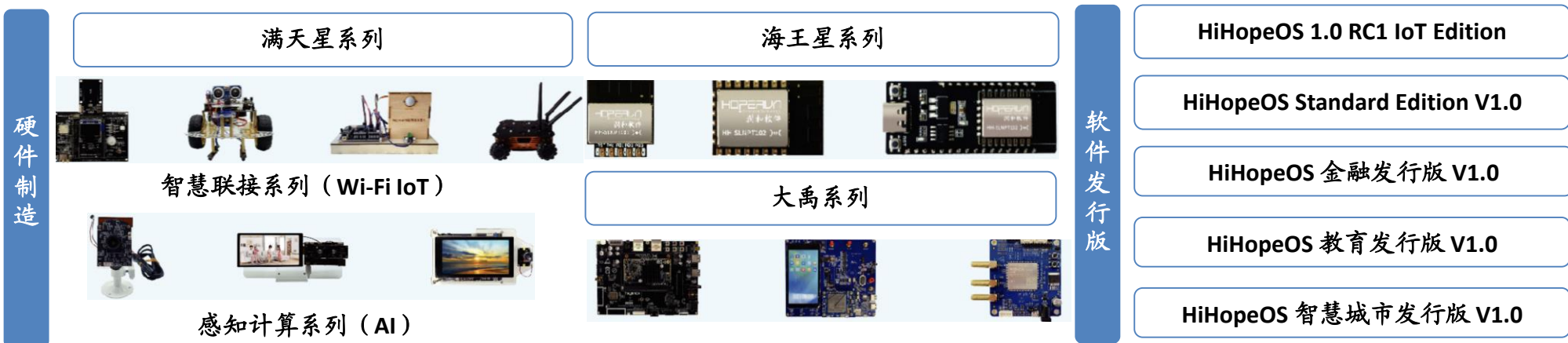


图28: 润开鸿产品矩阵



资料来源: 天眼查, 润和软件官网, HTI

4. 鸿蒙生态首批受益标的盘点

拓维信息自2017年以来与华为一直保持着深度合作，其子公司开鸿智谷专注开源鸿蒙生态，制定“1+X+N”体系，以1个在鸿OS/超级设备管理云平台为核心，打造在鸿控制器、在鸿学生终端等X款软硬一体设备，面向N个重点行业南北向同步发展。开鸿智谷已获得华为哈勃投资支持（持股5%），在鸿OS产品现已向教育、交通等领域发布。

图29: 开鸿智谷股权穿透图

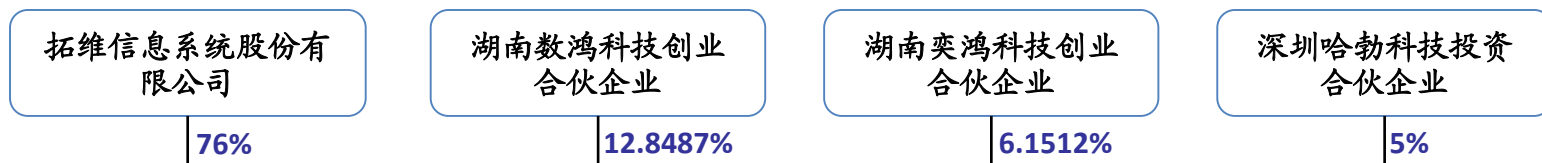


图30: 开鸿智谷产品矩阵



资料来源：天眼查，拓维信息官网，HTI

4. 鸿蒙生态首批受益标的盘点

九联科技作为首批OpenHarmony生态战略合作伙伴，OpenHarmony开源项目A类捐赠人、代码Top10贡献单位，依托其全资子公司九联开鸿发布了基于开源鸿蒙并应用于4K/8K产品的超高清音视频操作系统HoloCeneOS;同时在产品方面开发了基于开源鸿蒙的超高清机顶盒和摄像头、智能网关、路由等。公司已成功推出了电鸿OS、化工防爆机器人等鸿蒙行业解决方案。伴随盘古M900芯片测试通过，公司信创PC产品已着手该芯片方案的鸿蒙适配工作。

图31: 九联开鸿产品矩阵

软件产品	HoloCeneOS V1.0 超高清软件发行版	硬件产品	开发板		产品应用				
应用场景									
	智能停车场	智能抄表	智能路灯	智能农业	智慧工业				

资料来源：九联科技官网，OpenHarmony官网，HTI

4. 鸿蒙生态首批受益标的盘点

中科创达是全球领先的智能操作系统产品和技术提供商，其旗下子公司奥思维作为首批OpenHarmony发行版提供商之一，贡献超过数十万行代码。奥思维现新推出了基于OpenHarmony 3.2的通用显示操作系统OSware，它针对多个功能做了增强，如摄像头、多媒体编解码、UI体验等。目前该版本已成功商用于智慧停车场、智慧医院等场景中的智能终端。

图32: 奥思维股权穿透图

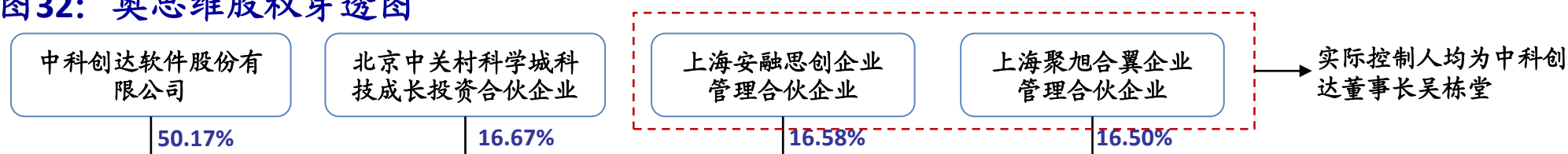
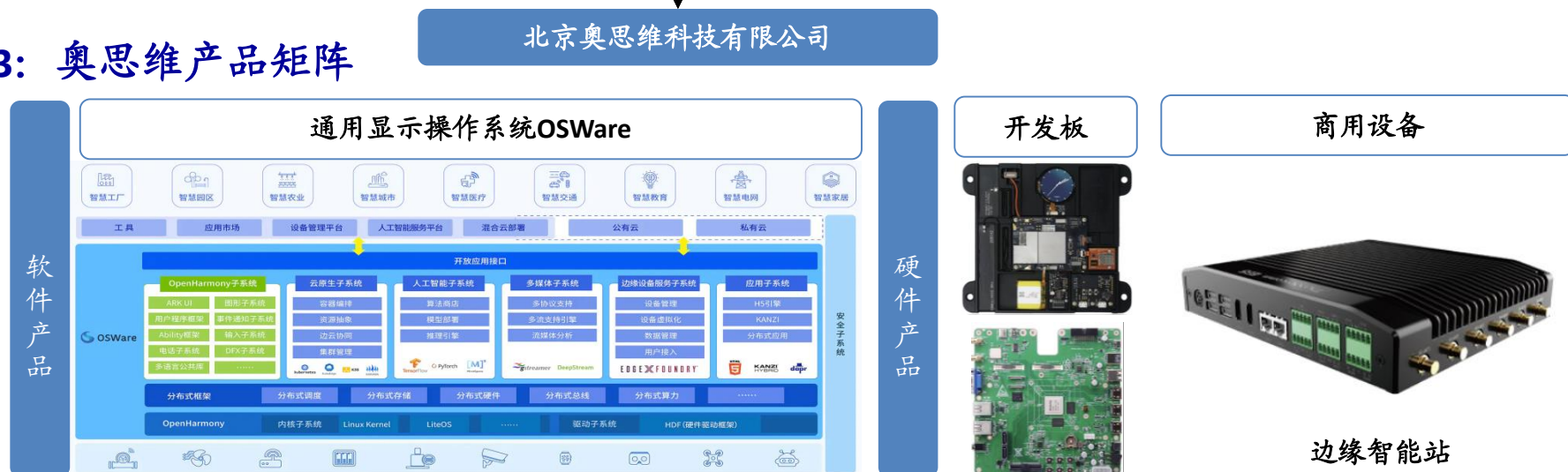


图33: 奥思维产品矩阵



资料来源: 天眼查, 奥思维官网, OpenHarmony官网, HTI

4. 鸿蒙生态首批受益标的盘点

东方中科旗下子公司万里红是数字安全和保密领域的国家队。万里红专注于打造 OpenHarmony 在政务领域生态落地，推出多款基于 OpenHarmony 的移动终端。万里红终端 OS 已经过超 3000 小时稳定性测试、7 万余次开关机测试，成为首个通过了 3.2.2 XTS 的 OpenHarmony 产品，实现了 WIFI、蓝牙、相机、音视频、移动数据、GPS 等移动终端的全功能，在体验和稳定性上表现可比肩其他国外移动终端。

图34: 万里红股权穿透图

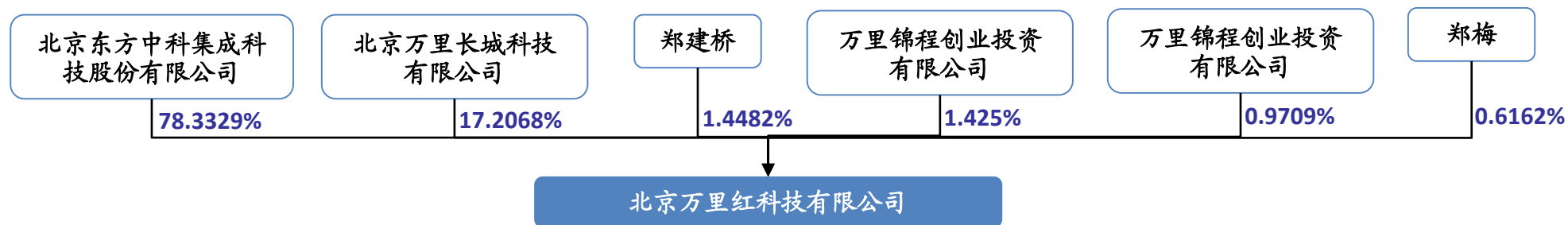


图35: 万里红产品矩阵



4.鸿蒙生态首批受益标的盘点

智微智能是国内领先的物联网硬件产品及解决方案提供商。2023年12月，公司与中软国际签订合作开发协议，共同打造开源鸿蒙物联网终端（包括OPS、云终端、边缘终端等）及计算机产品（包括工业计算机、商用计算机等），智微智能将为此提供相关硬件产品，成为鸿蒙AIPC的首批探索者之一。

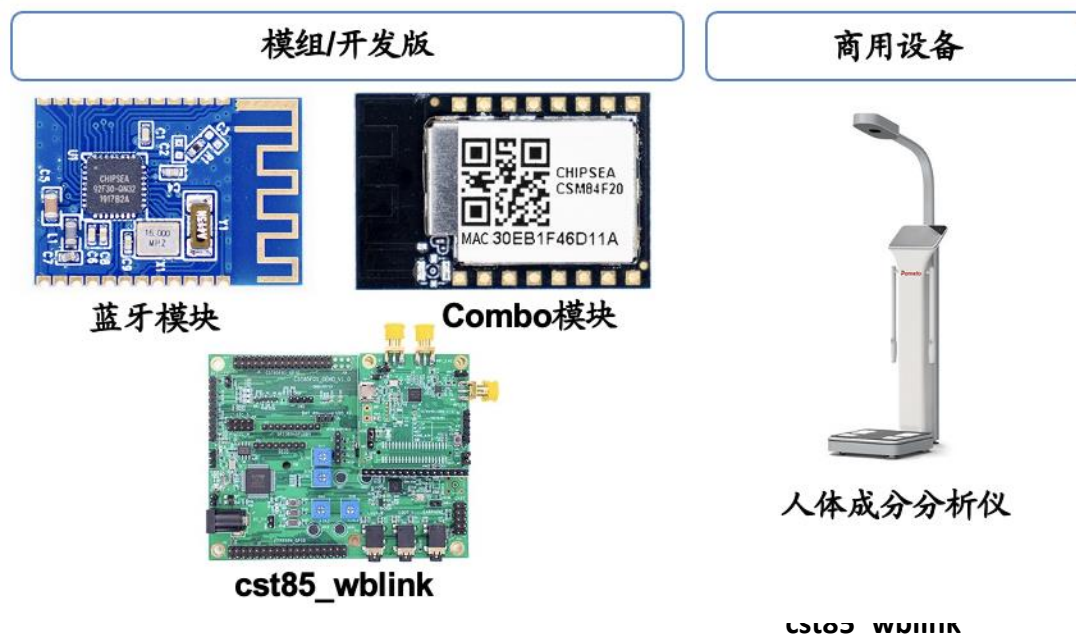
图36：智微智能与中软国际合作涉及领域



4. 鸿蒙生态首批受益标的盘点

芯海科技是华为鸿蒙战略合作伙伴。基于信号链 MCU 和 OpenHarmony 的数字底座，公司整合芯片、硬件、软件、算法等技术能力，持续鸿蒙生态领先优势，截至 2023H1，公司累计完成 15 个品类，72 个 SKU 的产品接入，在个人护理、运动健康、小家电等领域持续突破。公司 BLE 和 WIFI 芯片、模组已通过开源原子基金会 OpenHarmony XTS 认证，为智慧教育、智慧医疗等行业终端提供自主可控的 AIOT 芯片。此外，BLE 模组在智能仪表领域持续大规模出货。

图37: 芯海科技已通过兼容性测试产品



4. 鸿蒙生态首批受益标的盘点

诚迈科技专注于智能互联与操作系统技术的研发与创新，致力于成为全球领先的操作系统专家。公司现已发布基于 OpenHarmony 的商业发行版操作系统——HongZOS (鸿诚志远)，并推出基于此操作系统的鸿诚志远 HCPAD-100 开发板、鸿诚志远 HCA-100 开发板及相关软件解决方案，并深入工业、教育、矿业等行业场景创造价值。

图38: 诚迈科技已通过OpenHarmony兼容性测试产品



The infographic displays a variety of products compatible with OpenHarmony, organized into four main categories:

- 软件产品 (Software Products):** Includes the commercial release operating systems **鸿诚志远V2.0** and **鸿诚志远V1.0**.
- 模组产品 (Module Products):** Shows several development boards, including the **HCPAD-100** and **HCA-100**.
- 商务设备 (Business Equipment):** Features a **中控屏** (control screen), **三防手持终端** (rugged handheld terminal), and **三防平板** (rugged tablet).
- 教育设备 (Education Equipment):** Includes an **教育实训箱** (education training case) and **i宝机器人** (iBaby robot).

4. 鸿蒙生态首批受益标的盘点

证通电子作为开放原子基金会 OpenHarmony 项目群工作委员会委员单位，于2023年发布了符合金融级安全的物联网终端操作系统SZZT SecOS和智能终端操作系统发行版LightBeeOS，以适用于多种场景化金融需求。SZZT SecOS操作系统已经在公司多个产品上成功运用，装机量达数十万台，LightBeeOS在某银行“丝路通”助农金融终端场景落地。

图39: 证通电子已通过OpenHarmony兼容性测试产品



4. 鸿蒙生态首批受益标的盘点

优博讯作为开放原子开源基金会的金牌捐赠人以及 OpenHarmony 开源项目的B类捐赠人，公司长期以来始终将基于 OpenHarmony 的商业开发作为公司重要发展战略之一。继2022年推出了 OpenHarmony云音箱、搭载 OpenHarmony的测试版智能金融 POS，2023H1，公司自主研发的AIDC(自动标识与数据采集)终端开发板通过OpenAtom OpenHarmony3.1.1版本兼容性测评并正式发布。

创维数字是数字家庭解决方案与服务供应商，与华为在云电脑、华为云、信创产品、AI智能方案、车载智能系统等方面都有合作布局。目前公司已中标及定点了华为阿维塔E12车型显示屏项目，将适配华为 HarmonyOS智能座舱车机操作系统。同时，公司已成功推出以华为盘古M900处理器的信创电脑，目前也正在积极推动盘古M900的鸿蒙系统适配工作。

4. 鸿蒙生态首批受益标的盘点

浩辰软件是全球极少数掌握CAD核心技术的软件厂商，是国内为数不多的能与国外CAD软件龙头竞争的稀缺标的。公司作为鸿蒙OS全场景智慧生态的首批先行者，现已在积极探索基于鸿蒙OS的移动CAD解决方案，基于OpenHarmony的CAD软件未来可期。

智度股份是华为 HUAWEI Ads 在国内游戏、社交、工具、旅游行业四个互联网行业的独家广告代理商。我们认为，随着鸿蒙OS新版本的发布及华为手机、平板、PC等终端出货量的增加，华为相关产品的市场占有率有望进一步提升，从而提高广告主在华为终端、鸿蒙应用生态投放广告的需求，进而为智度股份带来更多利润。

鸿蒙生态逐渐发展壮大，建议重点关注以下原生鸿蒙&开源鸿蒙产业链标的：

华为鸿蒙深度合作伙伴：开源鸿蒙社区共建工作量前10，包括中国软件国际（计算机）、软通动力（计算机）、润和软件（计算机）、拓维信息（计算机）、九联科技（通信）、中科创达（计算机）等。

细分垂直领域鸿蒙生态参与者：新大陆（计算机）、新国都（计算机）、捷顺科技（计算机）、东方中科、智微智能（通信）、星网锐捷（通信）、芯海科技、优博讯（计算机）、诚迈科技（计算机）、证通电子（计算机）、浩辰软件（计算机）、有方科技（通信）、创维数字（通信）、亚华电子（计算机）、联迪信息（计算机）、云涌科技（计算机）等。

直接或间接受益于鸿蒙终端放量：智度股份、蜂助手等。

风险提示：鸿蒙技术研发不及预期；开源生态建设不及预期；市场竞争加剧

APPENDIX 2

重要信息披露

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APPENDIX 2

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APPENDIX 2

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分析师股票评级

优于大市，未来12-18个月内预期相对基准指数涨幅在10%以上，基准定义如下

中性，未来12-18个月内预期相对基准指数变化不大，基准定义如下。根据FINRA/NYSE的评级分布规则，我们会将中性评级划入持有这一类别。

弱于大市，未来12-18个月内预期相对基准指数跌幅在10%以上，基准定义如下

各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100, 美国 – SP500; 其他所有中国概念股 – MSCI China.

Ratings Definitions (from 1 Jul 2020):

Haitong International uses a relative rating system using Outperform, Neutral, or Underperform for recommending the stocks we cover to investors. Investors should carefully read the definitions of all ratings used in Haitong International Research. In addition, since Haitong International Research contains more complete information concerning the analyst's views, investors should carefully read Haitong International Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Analyst Stock Ratings

Outperform: The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

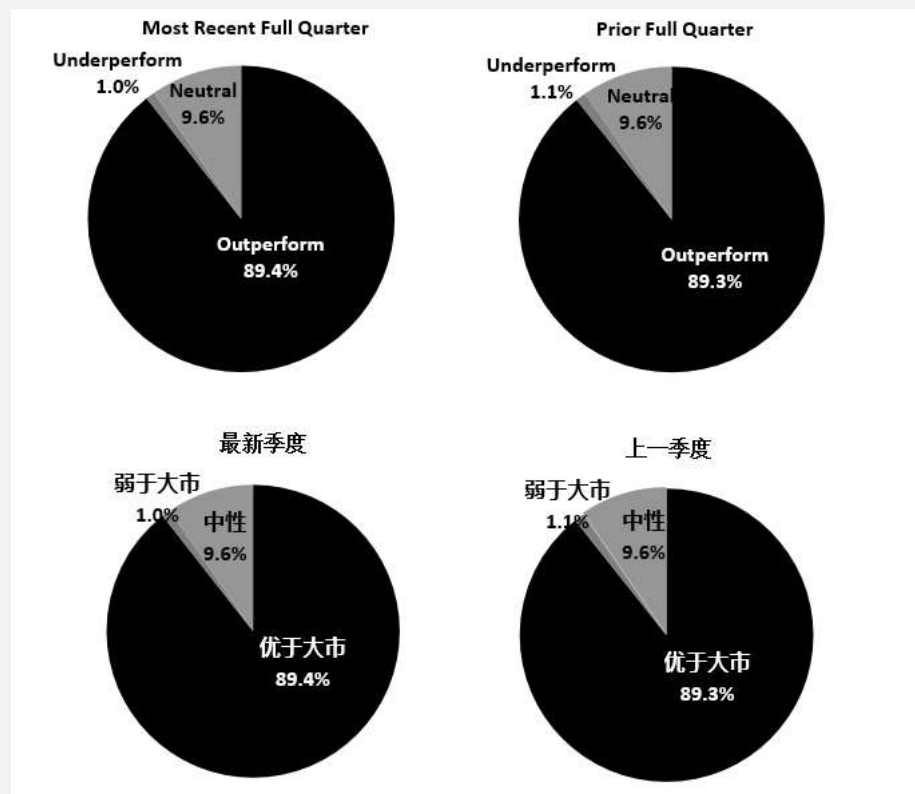
Neutral: The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

Underperform: The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

Benchmarks for each stock's listed region are as follows: Japan – TOPIX, Korea – KOSPI, Taiwan – TAIEX, India – Nifty100, US – SP500; for all other China-concept stocks – MSCI China.

APPENDIX 2

评级分布 Rating Distribution



APPENDIX 2

截至2023年12月31日海通国际股票研究评级分布

	优于大市	中性 (持有)	弱于大市
海通国际股票研究覆盖率	89.4%	9.6%	1.0%
投资银行客户*	3.9%	5.1%	5.6%

*在每个评级类别里投资银行客户所占的百分比。

上述分布中的买入，中性和卖出分别对应我们当前优于大市，中性和落后大市评级。

只有根据FINRA/NYSE的评级分布规则，我们才将中性评级划入持有这一类别。请注意在上表中不包含非评级的股票。

此前的评级系统定义（直至2020年6月30日）：

买入，未来12-18个月内预期相对基准指数涨幅在10%以上，基准定义如下

中性，未来12-18个月内预期相对基准指数变化不大，基准定义如下。根据FINRA/NYSE的评级分布规则，我们会将中性评级划入持有这一类别。

卖出，未来12-18个月内预期相对基准指数跌幅在10%以上，基准定义如下

各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100; 其他所有中国概念股 – MSCI China.

Haitong International Equity Research Ratings Distribution, as of December 31, 2023

	Outperform	Neutral (hold)	Underperform
HTI Equity Research Coverage	89.4%	9.6%	1.0%
IB clients*	3.9%	5.1%	5.6%

*Percentage of investment banking clients in each rating category.

BUY, Neutral, and SELL in the above distribution correspond to our current ratings of Outperform, Neutral, and Underperform.

For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category. Please note that stocks with an NR designation are not included in the table above.

Previous rating system definitions (until 30 Jun 2020):

BUY: The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

NEUTRAL: The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

SELL: The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

Benchmarks for each stock's listed region are as follows: Japan – TOPIX, Korea – KOSPI, Taiwan – TAIEX, India – Nifty100; for all other China-concept stocks – MSCI China.

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