

# 半导体行业部分海外成功并购案梳理 Overview of Successful Overseas Mergers and Acquisitions in the Semiconductor Industry

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## 投资要点



- ▶ 1、国家层面大力度支持并购重组。中国证监会《关于深化科创板改革 服务科技创新和新质生产力发展的八条措施》文件中明确提出"支持科创板上市公司开展产业链上下游的并购整合,提升产业协同效应。丰富支付工具,鼓励综合运用股份、现金、定向可转债等方式实施并购重组,开展股份对价分期支付研究。支持科创板上市公司聚焦做优做强主业开展吸收合并。"
- ▶ 2、国内半导体上市公司并购重组大幕拉开。在证监会发布《关于深化上市公司并购重组市场改革的意见》的推动下,我们看到半导体上市公司的并购激情被激活,例如纳芯微、长川科技、富乐德等。
- ▶ 投资建议。我们建议关注国内半导体上市公司积极参与并购重组,提升产业协同效应,可关注在手资金充沛、股东方持有潜在优质标的的半导体上市公司。
- 风险提示。政策变动风险,市场竞争风险,市场需求变化风险,产品迭代风险。

## 总结与启示



我们选取了部分半导体行业部分海外成功并购案进行梳理。 通过梳理,我们有以下三点总结与启示。

- ▶ 1、战略层面: 首先我们认为海外并购,不仅是资本输出的体现,更是国家综合实力提升和国际地位增强的象征。 通过并购海外公司,中国半导体公司能够迅速融入国际市场,实现国际化转型的战略。通过海外公司,进一步优化自有公司架构,提升运行效率。
- ▶ 2、技术层面: 其次我们认为随着海外并购的推进,中国半导体公司逐步在全球产业链和价值链中占据更有分量的位置,实现从低端产品向高端产品的提升,乃至吸收学习技术路线国产化。通过对海外细分领域优质标的的并购,国内企业一定程度上免去该赛道中高端产品研发技术壁垒,以及避免了国内初创公司等在细分领域中低端产品的内卷。
- ▶ 3、市场层面:有效利用被并购企业的资源,获取原有企业的分销渠道。最后我们认为通过并购方式,中国半导体公司可以利用被并购企业在当地市场的分销渠道,使公司能迅速地在当地市场上占有一席之地。通过中国市场和海外市场,有可能进一步提升规模化效应。



## 韦尔股份收购豪威科技梳理

## 并购背景



#### 公司介绍

韦尔股份:主营半导体设计及分销业务,其中设计业务的主要产品包括分立器件 (TVS、MOSFET等)、电源管理 IC、射频芯片、卫星接收芯片等。分销业务主要 代理及销售数十家国内外著名半导体生产厂商的产品,与设计业务相互补充,以满足终端客户多样化的产品市场需求。

豪威科技:美国豪威是位列索尼、三星之后的全球第三大图像传感器供应商,技术处于全球领先水平,其CMOS图像传感器在中高端智能手机市场占有较高份额,在安防、汽车用图像传感器领域也处于行业领先地位,具有很高的市场接受度和发展潜力。

资料来源:《上海韦尔半导体股份有限公司发行股份购买资产并募集配套资金暨关联交易报告书》,HTI

#### 收购动因



美国豪威在CIS领域具较强竞争力,由于索尼,三星科技实力的增长,市场份额被不断压缩,加之失去美国苹果的供货订单,豪威的营业收入水平呈波动趋势,2018年有小幅下降,净利润水平也还有很大的提升空间,美国豪威在这样的行业背景下亟需开拓新的海外市场。

韦尔股份在并购美国豪威之前,其主营业务主要是半导体分销业务和半导体设计和研发业务,半导体分销业务是企业收入的主要来源,而半导体元器件的自主研发业务效能明显落后于分销业务,韦尔股份亟需转型为半导体设计业务为导向的企业,以提升行业竞争力。

2018年到2019年之间,韦尔股份与北京豪威下属的全资子公司 Omni Vision Technologies Sinapore Pte.Ltd之间发生多起关联交易,涉及金额较大。

资料来源: 邢田雯《韦尔股份跨国并购豪威科技的价值创造效果研究》,HTI

## 收购方式



#### 第一次定增并购

2017年6月,韦尔股份发布重大资产重组停牌公告,于同年9月因北京豪威部分股东反对等原因发布终止重大资产重组公告。

#### 第二次定增并购

2018年5月,重启并购重组计划,韦尔股份发布重大资产重组停牌公告。

2018年7月,全资子公司拟以现金方式收购Seagull Strategic Investments (A1), LLC等 三家公司合计持有的北京豪威科技有限公司 1.9543%股权。

2018年8月,韦尔股份发布《发行股份购买资产并募集配套资金暨关联交易预案》。 公告拟以发行股份的方式购买 27 名股东持有的北京豪威96.08%股权、8 名股东持 有的思比科 42.27%股权以及 9 名股东持有的视信源 79.93%股权。

## 收购方式



2018年12月,《发行股份购买资产并募集配套资金暨关联交易报告书(草案)》, 韦尔股份拟以发行股份的方式购买 25 名股东持有的北京豪威85.53%股权、8 名股 东持有的思比科42.27%股权以及9 名股东持有的视信源79.93%股权。

同月,公司发布《重大资产购买报告书(草案)》,韦尔股份将以现金购买瑞滇投资持有的芯能投资 100%股权、芯力投资 100%股权。芯能投资、芯力投资合计持有北京豪威 10.5464%的股权。

## 部分交易对手收购股权结构变化



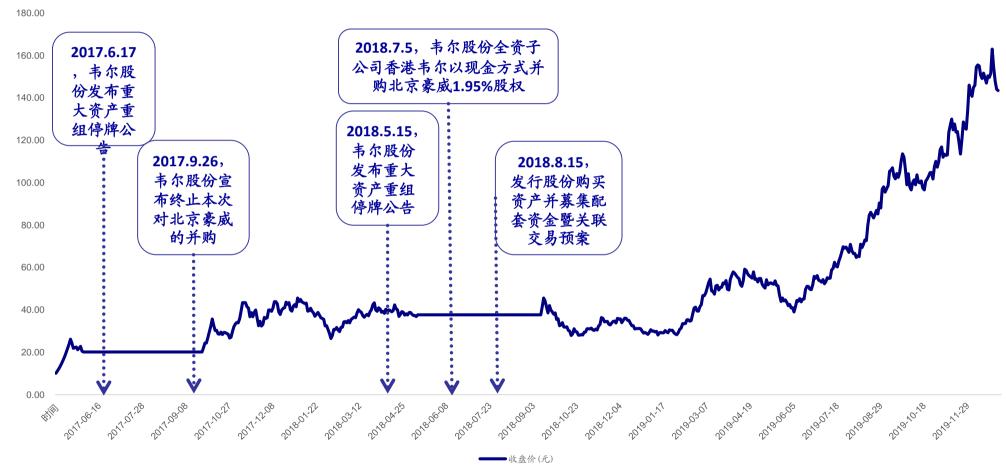
并购完成后				
序号	股东名称	持股比例		
1	绍兴韦豪	9.41%		
2	青岛融通	7.24%		
3	Seagull (A3)	3.61%		
4	嘉兴水木	3.12%		
5	嘉兴豪威	3.12%		
6	上海唐芯	2.68%		
7	Seagull Investments	2.67%		
8	开元朱雀	2.37%		
9	元禾华创	2.28%		
10	北京集电	1.89%		

资料来源:韦尔股份《发行股份购买资产并募集配套资金暨关联交易之非公开发行情况报告书(摘要)》,HTI

#### 股价变化



#### 图: 韦尔股份收购前后部分动态和股价变化



资料来源:公司相关公告, Wind, HTI

## 并购方的业务发展与协同



2019年8月,公司完成了收购北京豪威及思比科的重大资产重组事项。本次收购完成后,公司主营业务仍旧为半导体产品设计业务和半导体产品的分销业务两部分,援引韦尔股份2019年报, 2018年度公司半导体设计业务收入占比主营业务收入的比例为20.99%,2019年度公司半导体设计业务收入占比主营业务收入的比例提升至83.56%。半导体产品设计研发业务占比明显提升,且半导体产品设计研发业务中的产品结构发生了较大变化。

目前公司半导体产品设计研发业务主要分为两大业务体系,分别为图像传感器产品和其他半导体器件产品。公司图像传感器产品由豪威科技和思比科运营,其中最主要的产品为CMOS图像传感器芯片,占公司2019年度营业收入的比例达71.74%。公司作为全球知名的提供先进数字成像解决方案的芯片设计公司,产品已经广泛的应用于消费电子和工业应用领域,包括智能手机、平板电脑、笔记本电脑、网络摄像头、安全监控设备、数码相机、汽车和医疗成像等。公司图像传感器产品丰富,包括CMOS图像传感器芯片、硅基液晶投影显示芯片(LCOS)、微型影像模组封装(CameraCube Chip)、特定用途集成电路产品(ASIC),其中CMOS图像传感器芯片产品型号覆盖了8万像素至6,400万像素等各种规格,公司具备完善的产品体系。

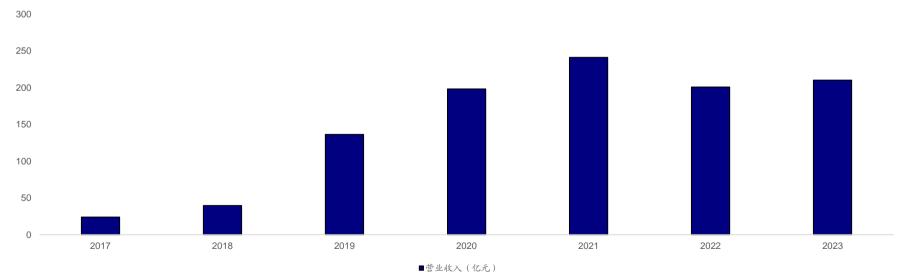
## 收购Synaptics的TDDI业务



我们看到韦尔股份在收购豪威科技后,整体营收和产品线都得到较大程度提高,这也给与公司信心积极发掘其他优质标的。

2019年12月,韦尔股份收购了Synaptics的TDDI业务,通过这次收购,业务能力得到提升,大幅提升公司的盈利水平。有助于进一步丰富韦尔股份的产品线,尤其是在触控与显示驱动器芯片领域。

#### 图: 韦尔股份2017-2023年营收



资料来源: Wind, HTI

## 被并购方的业务发展



我们看到豪威科技在技术发展上有许多进步,例如新产品OV50VK和OV50H在推广上取得了成功。

其中OV50H采用豪威集团的PureCel® Plus-S晶片堆叠技术,可实现优异的图像传感器性能。OV50H采用豪威集团的首项H/V QPD自动对焦技术。QPD在传感器的整个图像阵列中可实现2x2相位检测自动对焦(PDAF)功能,而H/V模式可确保水平和垂直方向都在同一帧内,覆盖率达到100%。这一功能能够改进距离计算,实现更快的自动对焦,并提升弱光性能。上述功能与用于QPD彩色滤光片阵列的片上像素还原算法相结合,可为旗舰和高端智能手机的宽幅和超宽幅后置摄像头带来优质的图像质量。

表: OV50H在部分高端机型主摄量产

机型	主摄	上一代对应CIS
小米14	OV50H	索尼 IMX800(小米13)
魅族21 Pro	OV50H	索尼 IMX766(魅族20 Pro)
vivo X Fold3 Pro	OV50H	索尼 IMX866(vivo X Fold2)

资料来源: 九锋网、小米官网、搜狐网援引大话百科天地, vivo官网, HTI



## 闻泰科技收购安世半导体梳理

## 并购背景



#### 公司介绍:

闻泰科技:从事的主要业务为移动终端、智能硬件等、笔记本电脑、虚拟现实、车联网、汽车电子等物联网领域产品的研发和制造,是中国领先的移动终端和智能硬件产业生态平台,主要提供的产品为移动通讯整机及移动通讯设备等移动通信产品,其中以智能手机为主。公司客户均为华为、小米、联想、魅族、中国移动、MOTOROLA、华硕等全球主流品牌。

安世集团:全球领先的半导体标准器件供应商,专注于分立器件、逻辑器件及MOSFET器件的设计、生产、销售,其产品广泛应用于汽车、工业与能源、移动及可穿戴设备、消费及计算机等领域,总部位于荷兰奈梅亨。安世集团前身为恩智浦的标准产品事业部,拥有60多年的半导体行业专业经验,于2017年初开始独立运营。恩智浦为全球汽车半导体领域的领导企业,2016年将两块业务高功率混合信号产品业务和标准产品业务中的后者剥离至目标公司。

#### 收购动因



闻泰科技与安世集团处于产业链上下游,在客户、技术和产品等多方面具有协同效应,若闻泰科技成功取得安世集团的控制权,一方面,双方在整合过程中可以实现资源的互相转换,加速安世集团在中国市场业务的开展和落地,通过闻泰科技的资源进一步拓展其在消费电子领域的市场;另一方面,闻泰科技将向产业链上游延伸,打通产业链核心环节,实现主要元器件的自主可控,有助于闻泰科技构建全产业链生态平台规划的快速落地。

安世集团的销售收入主要来自汽车电子领域,若闻泰科技成功取得安世集团的控制权,将切入到汽车电子领域,在新能源汽车大规模替代燃油车、自动驾驶、无人驾驶等先进技术成熟前提前布局,实现战略卡位,为闻泰科技提供更具想象空间的增长前景。

## 收购方式



2018年4月,合肥中闻金泰牵头组成的联合体参与了关于合肥芯屏公开转让所持合肥广芯493664.63万元人民币财产份额(间接持有安世集团的部分股权)项目的竞拍并竞拍成功。2018年5月2日,联合体与合肥芯屏签署《产权转让合同》,约定约定联合体受让合肥芯屏持有的合肥广芯493664.63万元财产份额,转让价款为114.35亿元。

2019年6月,上市公司获准通过发行股份及支付现金的方式实现对目标公司安世集团的间接控制。在境内,上市公司拟通过发行股份及支付现金的方式收购境内基金之上层出资人的有关权益份额。在境外,上市公司关联方通过支付现金的方式收购境外基金中智路资本作为GP拥有的全部财产份额和相关权益。上市公司已累计持有合肥裕芯74.46%的权益比例,并间接持有安世集团74.46%的权益比例。

2020年6月,上市公司拟通过发行股份及支付现金的方式分别收购合肥裕芯的4名股东(即 4 支境内基金)之上层出资人的有关权益份额。上市公司将合计持有合肥裕芯98.23%的权益比例,间接持有安世集团98.23%的权益比例,剩余1.77%股权由合肥广坤半导体产业投资中心间接持有。建银国际于2020年7月23日通过重庆联合产权交易所网站公开发布合肥广坤LP份额转让信息。2020年9月4日,公司收到产交所通知,获悉公司确定成为本次转让受让方,成交金额为36600万元。本次收购完成后,公司将持有安世集团100%股权。

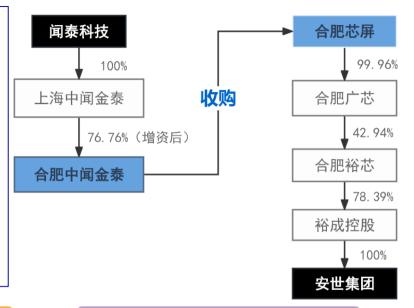
#### 收购方式

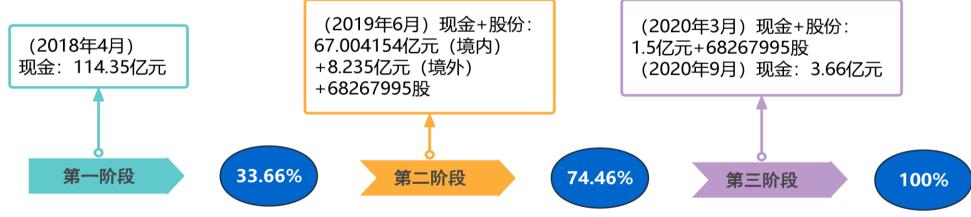


第一阶段(2018年4月), 收购合肥芯屏持有的标的资产。

第二阶段(2019年6月),以发行股份及现金方式继续收购安世半导体持有的股份份额。

第三阶段(2020年3月),再次以发行股份或现金方式继续收购少数股东权益份额以实现对安世半导体的完全控股。



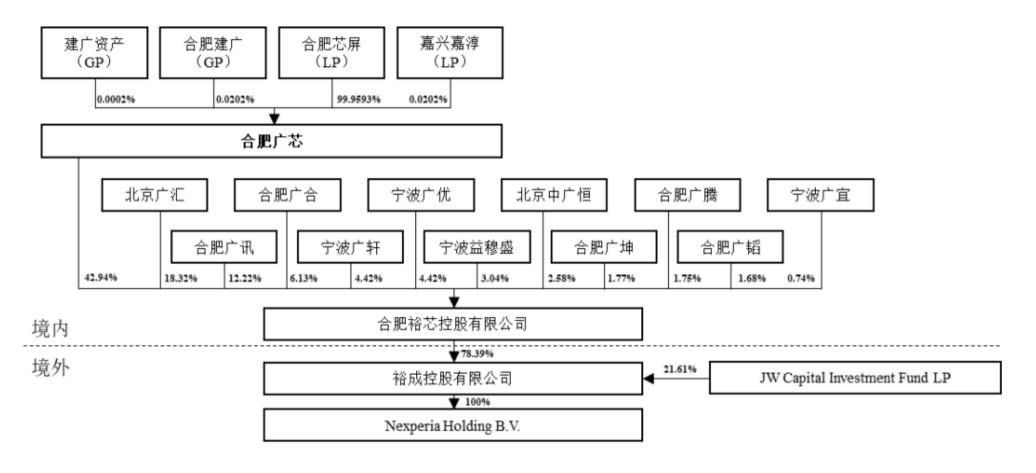


资料来源: 闻泰科技重大资产购买暨关联交易报告书(草案),闻泰科技股份有限公司发行股份及支付现金购买资产并募集配套资金暨 关联交易报告书(修订稿),闻泰科技股份有限公司发行股份及支付现金购买资产并募集配套资金报告书,HTI

#### 股权结构变化



#### 图:安世股权结构图(第一阶段收购前)

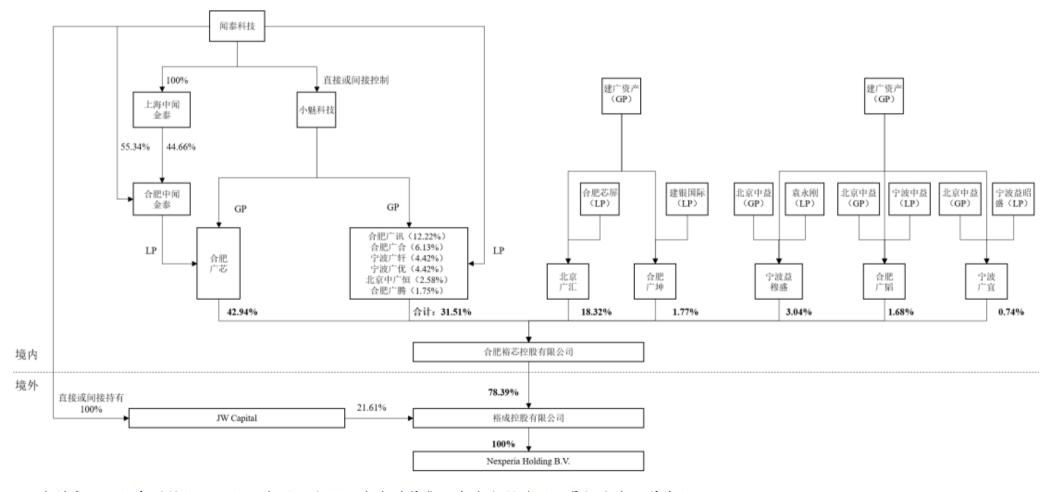


#### 资料来源: 闻泰科技重大资产购买暨关联交易报告书(草案), HTI

#### 股权结构变化



#### 图:安世股权结构图(第二阶段收购后)



资料来源: 闻泰科技发行股份及支付现金购买资产并募集配套资金暨关联交易报告书(草案), HTI

#### 时间线

安徽合肥公共资源交易中心发布《安



上市公司公告《重大资产购买暨关联交

易实施情况报告书》。

世半导体部分投资份额退出项目公 合肥中闻金泰已完成收购合肥芯屏 告》(项目编号: 2018CFCZ0087). 2018年5月2日,联合体与合肥芯屏签署 持有的合肥广芯493664. 630659万元 合肥芯屏对其所持有的合肥广芯 《产权转让合同》,约定联合体受让合肥 人民币LP财产份额的资产过户及工 493664. 630659万元财产份额(间接 芯屏持有的合肥广芯493664. 630659万元 商变更。 持有安世半导体的部分股份)进行公 财产份额,转让价款为114.35亿元。 开转让。 2019 2018 2018 2019 2018 2018 年5月 年9月 年2月 年3月 年3月 年4月 2日 17日 28日 2日

资料来源: 闻泰科技重大资产购买暨关联交易报告书(草案),闻泰科技发行股份及支付现金购买资产并募集配套资金暨关联交易报告书(草案),HTI

上市公司发布重大现金

购买草案。

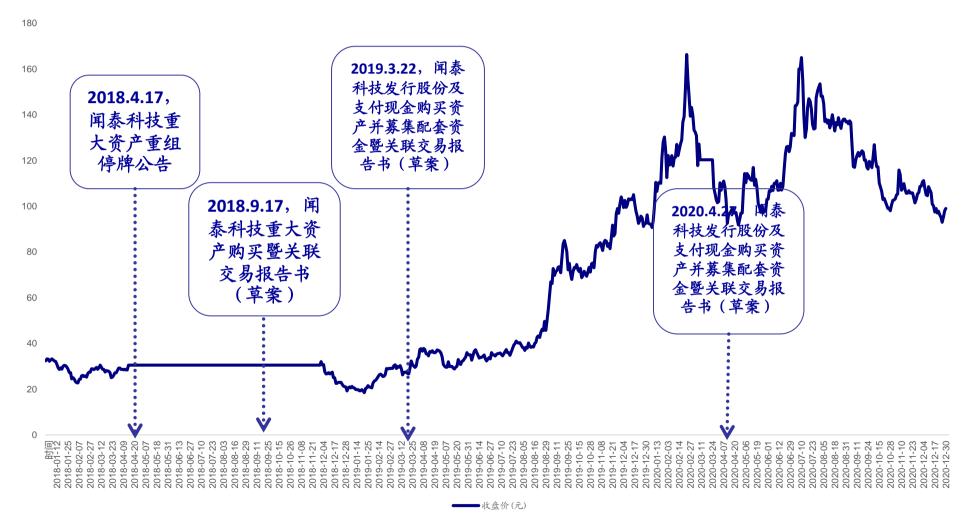
合肥中闻金泰牵头组成的联合体参与了关于合肥芯屏公开转让所持合肥广芯493664. 630659万元

人民币财产份额(间接持有安世 集团的部分股权)项目的竞拍并 竞拍成功。

#### 股价变化



#### 图:闻泰科技收购前后部分动态和股价变化



## 业务发展与协同



- (1)业务资源整合。对于闻泰科技而言,安世半导体不仅能够为闻泰科技的生产制造提供元器件,建立稳定的供货渠道,并且推动闻泰科技实现半导体业务的自主化,扩大了生产规模。对于安世半导体而言,闻泰科技生产规模的扩大也为安世半导体带来了更多的业务量,利用闻泰科技的销售渠道进一步开发国内消费电子半导体市场,拓展业务资源。
- (2)客户资源整合。对于闻泰科技而言,并购安世半导体后能够有效控制上游成本,继而将更多的资金投入到研发当中,推动产品和产能升级,赢得更多客户的信任和拥护。同时,借助安世半导体在汽车半导体和智能终端领域的优势地位,丰富海内外优质客户资源。对于安世半导体而言,其主要客户集中于欧美地区,借助间泰科技在ODM领域的影响力,能够迅速进入中国市场,实现客户资源互补。

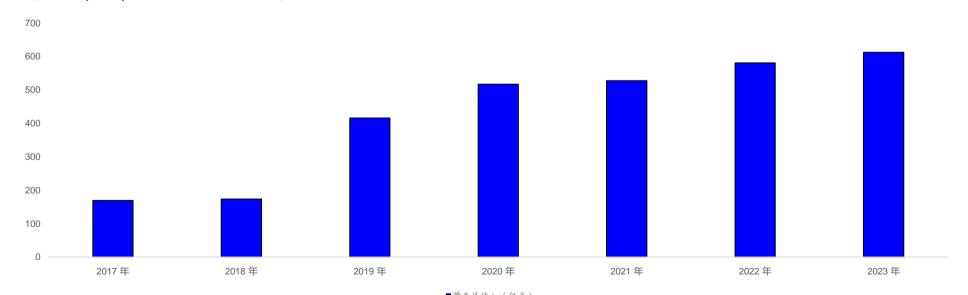
资料来源:余冬根,李昂《企业并购动因及价值创造路径分析——以闻泰科技跨国并购安世半导体为例》,HTI

## 业务发展与协同



(3)技术资源整合。一方面,安世半导体是全球功率半导体的领先企业,闻泰科技通过吸收安世半导体的研发、设计、生产等环节的关键技术,突破技术壁垒,形成技术优势。另一方面,闻泰科技与安世半导体在产业链中属于上下游关系,并购能够更好地发挥出二者的技术协同效应,将智能终端技术与安世芯片及封装技术相融合,发展新一代半导体技术,以适应日益多元化的市场需要。

#### 图:闻泰科技2017-2023营收



资料来源:余冬根,李昂《企业并购动因及价值创造路径分析——以闻泰科技跨国并购安世半导体为例》,ifind,HTI



## 赛微电子(曾名耐威科技)收购赛莱克斯梳理

## 并购背景



#### 公司介绍:

赛微电子: (曾用名: 耐威科技)长期从事惯性导航系统、卫星导航产品的研发、生产与销售,已经形成了"惯性导航+卫星导航+组合导航"全覆盖的自主研发生产能力。目前仍是国内少数具有惯性导航产品自主研发生产能力且产品链比较完整的企业之一,部分主导产品达到军事及战术级别的运用要求;同时也是国内少数导航定位领域技术及产品均覆盖惯性导航及卫星导航的企业之一。

赛莱克斯:全球领先的MEMS芯片制造商专注于MEMS芯片的生产代工业务,为全球领先的纯MEMS代工企业,该公司位于瑞典斯德哥尔摩,客户遍布北美、欧洲和亚洲,产品应用覆盖了工业、生物医疗、通讯和消费电子等领域。目标公司分别拥有一条6时及一条8时MEMS生产线,两条生产线均能支持MEMS产品的工艺开发及批量生产。

## 并购背景



#### 收购动因:

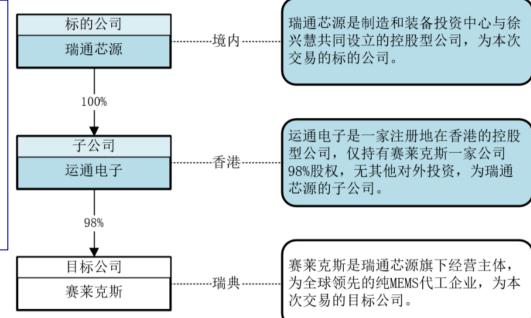
本次交易将大幅提升赛微电子自主开发和生产高性能MEMS惯性传感器的能力,提高公司导航产品的精度与集成度,进一步缩小产品尺寸并降低生产成本,拓宽惯性导航产品的应用领域,公司营业收入、净利润水平将得到显著提升。

赛莱克斯代表着目前世界MEMS芯片制造领域的一流水平,这将对培养赛微电子的MEMS生产能力、推动我国MEMS产业化进程起到至关重要的作用。通过本次交易,赛微电子将获得国际先进的MEMS工艺开发和生产平台,实现自主开发及生产高性能MEMS陀螺仪、高精度MEMS加速度计等主要惯性器件的能力,打通惯性导航产业链中的核心环节,围绕公司在导航定位领域制定的"器件-产品-系统-服务"一体化发展目标,形成惯性导航业务的全产业链布局,从而进一步奠定公司在国内惯性导航产业中的领先地位。

## 第一阶段: 定增换股,获得Silex控制权



本次交易中,耐威科技拟以发行股份的方式购买北京集成电路投资中心、徐兴慧合计持有的瑞通芯源100%的股权。交易各方协商确定瑞通芯源100%股权作价74987.5028万元,并全部以发行股份的方式支付。此次收购,赛微电子获得赛莱克斯98%的控制权。



单位: 万股

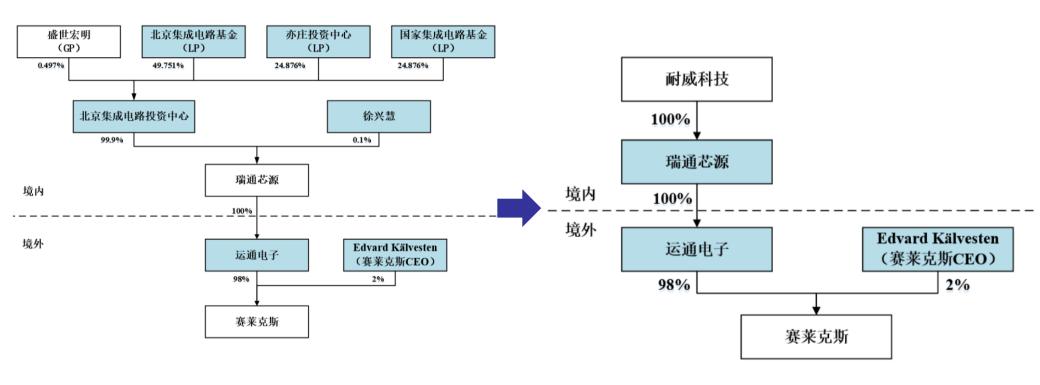
发行对象/认购人	发行数量	占交易完成后总股本比例	
北京集成电路投资中心	1,716.9956	9. 2717%	
徐兴慧	1.7188	0. 0093%	
合计	1, 718. 7144	9. 2810%	

资料来源:北京耐威科技股份有限公司发行股份购买资产暨关联交易报告书 (修订稿),HTI

#### 股权结构



## 图: 赛微电子股权结构变化 (收购第一阶段前后)



资料来源:北京耐威科技股份有限公司发行股份购买资产暨关联交易报告书(修订稿),HTI

## 第二阶段:回购少数股东,Silex全资化



北京耐威科技股份有限公司的控股子公司Silex收回少数股东Edvard Kälvesten 所持有的Silex2%的股权。Silex收回并减少该 2%股权(15.4877万股股份),随后通过非限制性自有资本转增股本的方式向剩余唯一股东运通电子发行等量股份,使得Silex的注册资本保持387.1915万瑞典克朗、总股份数保持774.3830万股不变。本次交易完成后,Silex将成为公司的全资子公司。

图: 回购前后Silex股权结构变化

单位: 万股

序号	股东	持股数	持股比例
1	运通电子	758. 8953	98.00%
2	Edvard Kälvesten	15. 4877	2.00%
合计		774. 3830	100. 00%

附注: Edvard Kälvesten 为赛莱克斯的创始人兼首席执行官

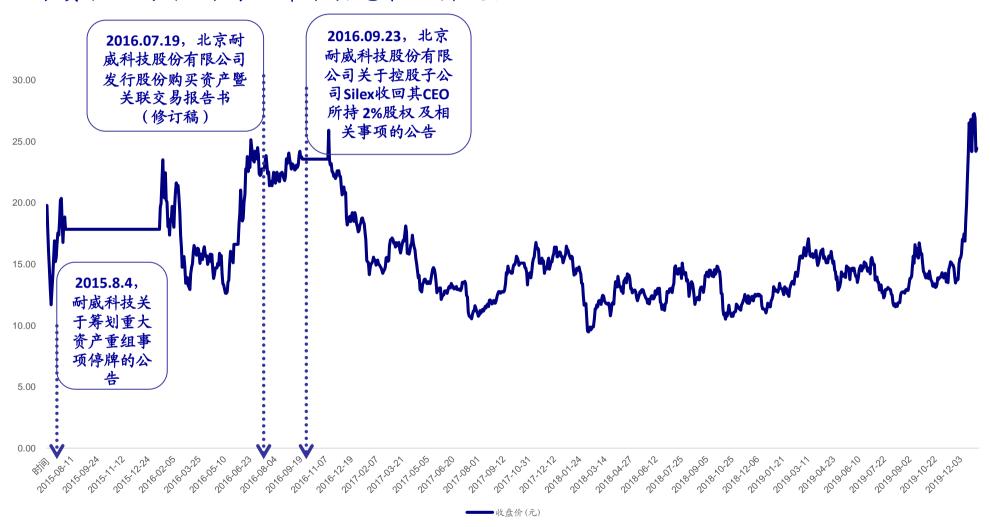
序号	股东	持股数	持股比例
1	运通电子	774. 3830	100.00%
	合计	774. 3830	100.00%

资料来源:北京耐威科技股份有限公司关于控股子公司Silex收回其CEO所持2%股权及相关事项的公告,HTI

#### 股价变化



#### 图:赛微电子收购前后部分动态和股价变化



## 业务协同与发展



通过本次交易,赛微电子将打通MEMS惯性导航产业链上下游,打造更加完整的导航产业布局,将促进赛微电子与赛莱克斯的业务结构互补,在导航业务和MEMS业务板块,将形成导航产品、惯性器件及MEMS芯片齐头并进的业务格局。交易完成后,赛微电子利用赛莱克斯的工艺开发及代工生产能力,致力于建立国内最高水平的MEMS产业化平台,孵化MEMS上游设计企业,促进产业集聚,实现MEMS全产业链在京津冀地区集群发展,以确立公司在国内、国际市场体系中的影响力。

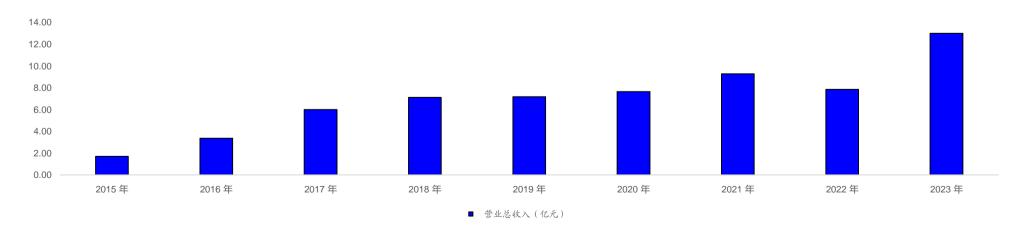
基于瑞典Silex成熟的中试线,公司积极扩充瑞典产线。瑞典产线一方面积极推动已有8英寸产线的产能利用率爬坡,另一方面也在积极新建12英寸产线,将逐步形成从中试到量产的衔接服务能力,从而持续提高产能利用率。2023年,瑞典Silex的业务情况已经恢复至正常水平,挖掘现有产线产能潜力的同时,也正在布局12英寸产线,积极服务市场需求。基于对下游应用市场需求增长的预期,瑞典Silex认为其业绩在未来将持续保持增长。

## 业务协同与发展



在中国境内,依托于已建成并持续扩充产能的北京FAB3,赛微电子规划在中国境内继续建设独立自主、面向现实及未来需求的MEMS中试线,通过提供工艺开发及小批量代工服务,为境内外MEMS规模量产线储备并导入相应的客户及产品,最终同时提高境内外的工艺开发及规模量产能力。北京FAB3已建成并运转一期产能为1.2万片/月,其中包括了公司与武汉敏声合作建设的BAW滤波器专线,同时,北京FAB3正在持续推进建设二期剩余产能1.8万片/月的建设。

#### 图:赛微电子2017-2023营收



资料来源: ifind, HTI

#### 风险提示



> 政策变动风险,市场竞争风险,市场需求变化风险,产品迭代风险。

#### **APPENDIX 2**



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#### **APPENDIX 2**



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No Disclosure



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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):

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#### **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.

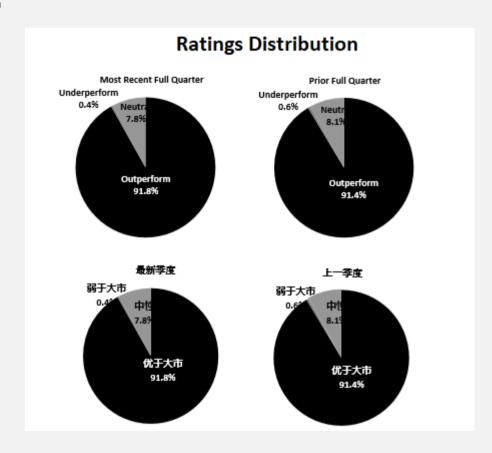
**Neutral:** The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

**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.



评级分布Rating Distribution





### 截至2024年9月30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	91.8%	7.8%	0.4%
投资银行客户*	3.5%	4.4%	0.0%

\*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

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.

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	Outperform	Neutral (hold)	Underperform
HTI Equity Research Coverage	91.8%	7.8%	0.4%
IB clients*	3.5%	4.4%	0.0%

<sup>\*</sup>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 helow.

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