

Guoguang Electric (688776 CH)

Initiating coverage: electric vacuum microwave device leader; driven by domestic substitution in nuclear market

Demand for domestic substitution in the industrial sector is strong, ITER project and domestic related projects are coming in, and the new spike in the nuclear industry could lead to long-term high growth. We are optimistic about Guoguang's sustainable development and initiate coverage with a BUY rating and a target price of RMB232.

Buildup in microwave devices; expanding in response to nuclear market growth

Guoguang's predecessor was a state-owned factory named 776, established as early as during China's first Five-Year Plan period. It assisted the Soviet Union to build one of two factories to produce microwave electric vacuum devices and was later restructured into a private sector company. Its business covers the two major technological routes of microwave and vacuum to form three major product applications: microwave devices, nuclear industry equipment and components, and civilian products. Guoguang has grown into a large domestic company that produces vacuum devices and vacuum technology products. It is also the only Chinese private sector company that has independently developed and produced special electric vacuum devices such as traveling wave tubes.

Microwave devices: including microwave electric vacuum devices and microwave solid-state devices. Guoguang is the first domestic manufacturer to develop and produce both electric vacuum and solid-state microwave devices.

Nuclear industry equipment and components: including ITER auxiliary equipment, special pumps and valves used in the nuclear industry. Guoguang's products are unique as it owns proprietary intellectual property rights, placing it at the tech forefront of the domestic market. It has no domestic competitors with similar products.

Civil market: its core products here are vacuum measurement and control components used in the pressure vessel industry. The company takes the lead in the R&D of wide-ranging, small-volume and remote fax air-monitoring instruments. It produces the only product in China that has passed appraisal by the National Hazardous Chemicals Storage and Transportation Equipment Technology and Information Working Committee with national explosion-proof certification. Its comprehensive strength and profitability have given it domestic and global leadership.

Comprehensive transformation to a significant upward trend in profitability

2020 revenue was RMB446m, up 25.61% yoy, and net profit was RMB95m, up 126.77% yoy. After a decline in 2018, Guoguang's net profit growth rates exceeded 100% over two consecutive years and saw a CAGR of 122.4% over 2018-20. 1H21 revenue came to RMB265m, up 26.57%yoy, and net profit was RMB79m, up 72.82%yoy, close to whole-year 2020 level, so we expect high growth to be maintained. In addition, expense ratio in the period declined and expense control improved. In terms of profit margin, as the scale of shipments increased, both gross profit margin and net profit margin were on a rising track. We believe profitability would continue to improve.

Core supplier of vacuum and microwave devices; high-volume nuclear industry

Guoguang's microwave device business mainly includes vacuum microwave and solid-state microwave devices. Microwave devices are mainly used in the military field and are at the core of military equipment systems such as phased array radar, microwave

Initiation of coverage

BUY

Target price:	RMB232.00
Share price (8 Sep):	RMB188.88
Up/downside	22.8%

Company information	
52wk High (09/08/2021)	193.23
52wk Low (08/31/2021)	127.77
P/E (Trailing 12m)	113.50
Dividend Yield	0.00
Price to Book Ratio	9.50
Price to Sales Ratio	29.16
EV / Trail 12M EBITDA	113.47
Shares Outstanding (m)	77.4
Market Cap (RMBm)	14,622.5

Source: Wind

Financial summary (RMB)			
	21E	22E	23E
Revenue (m)	661	980	1,416
YoY Growth (%)	48.20	48.26	44.55
EBITDA (m)	224	364	559
Net profit (m)	172	299	456
YoY Growth (%)	80.73	73.18	52.85
EPS (price/share)	2.23	3.86	5.90
P/E Ratio (x)	72.74	42.00	27.48
Price to Book Ratio (x)	16.95	12.07	8.39
Price to Sales Ratio (x)	18.98	12.80	8.86
EV/EBITDA (x)	55.31	34.08	22.14

Source: Tianfeng Securities estimate

Share price performance



Source: BigData

TFI Asset Management Limited would like to acknowledge the contribution and support provided by **Li Lu Jing (李鲁靖)** and **Liu Ming Yang (刘明洋)**, employee of Tianfeng Securities Co., Ltd.

The target price of Guoguang Electric (688776 CH) is forecasted by TFI Asset Management Limited based on current information. The target price may fluctuate with reference to market fluctuations or other relevant factors. TFI Asset Management Limited may release publications which are inconsistent with the opinions, speculations, and predictions contained herein.

communications and electronic countermeasures. Compared with solid-state devices, electric vacuum devices have long maintained an advantageous position in the high-frequency range. With the continuous advancement of low-orbit satellite projects, the company's demand for vacuum devices could increase significantly.

Guoguang's nuclear industry equipment and component products mainly include ITER ancillary equipment, special pumps and valves for the nuclear industry. Currently, its nuclear industry products are mainly at the small-batch production and prototype R&D stages. China's nuclear industry is in urgent need of independent innovation and localization in key components. We believe Guoguang's nuclear industry will enter a rapid growth cycle.

Valuation and risks

Summary: The company is deeply engaged in the segments of microwave devices, with dual drivers in vacuum devices and solid-state devices, especially vacuum devices. With the advancement of electronic countermeasures and low-orbit satellites, we expect the microwave device business to continue to grow, followed by nuclear. Demand for domestic substitution in the industrial sector is strong, ITER project and domestic related projects are coming in, and the new spike in the nuclear industry could lead to long-term high growth. We are optimistic about Guoguang's sustainable development.

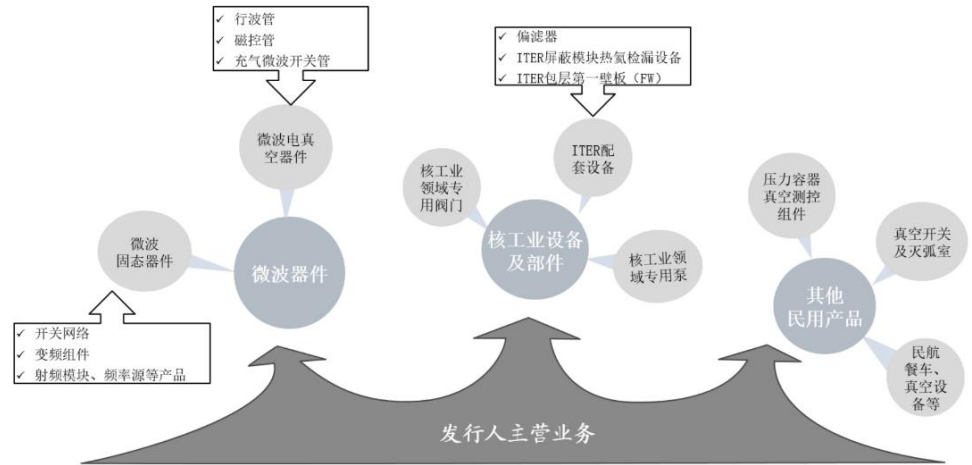
Valuation: we estimate revenue at RMB661m/980m/1.42bn in 2021/22/23E, net profit at RMB172/299/456m, corresponding to EPS of RMB2.23/3.86/5.90, and PE of 72.74/42.00/27.48x. Relative to average peer PEG, its PE corresponds to 60x in 2022E. We initiate coverage with a BUY rating and a target price of RMB232.

Risks include: higher customer concentration risks; technological earmarked funds to repay debt could affect cash flow for the company; new product development risks; first wall (FW) and nuclear pump production risks; and short-term share price volatility.

深耕微波器件领域，拓展核工业迎快速发展期

公司全称成都国光电气股份有限公司，前身为国营七七六厂，早在“一五时期”就已成立，为苏联援建定位从事微波电真空器件的两厂两所之一，后改制为民企。公司沿着微波与真空两大技术路线延伸，形成了微波器件、核工业设备及部件和其他民用产品三大应用产品体系。目前，公司已经发展成为真空器件、真空技术产品研制和生产的国内大型企业，公司亦是国内唯一一家能够独立研发、生产行波管等特种电真空器件的民营企业。

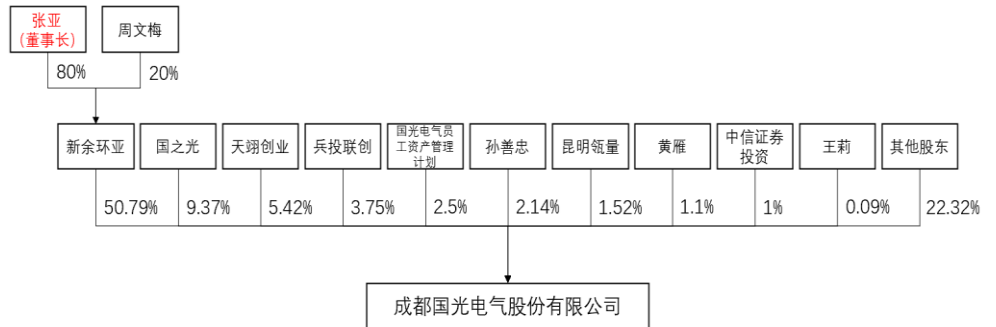
图 1：公司主营业务



资料来源：公司招股说明书，天风证券研究所

公司股权集中，控股股东为新余环亚，实际控制人为董事长张亚及其配偶周文梅。新余环亚直接持有公司 3,931.8013 万股股份，持股比例为 50.79%，张亚、周文梅分别持有新余环亚 80%和 20%的股权，两人系配偶关系。

图 2：公司股权结构图（截至 2021.8.31）



资料来源：wind，天风证券研究所

业务角度看，公司多项产品处于国内龙头地位，技术上具有独占优势，广泛应用于航空、航天、核工业、新能源等领域。其中，

- 微波器件包括微波电真空器件和微波固态器件，公司是国内最早同时从事电真空和固态两种微波器件研制生产的厂家，并拥有三条军用电子元器件生产线（GJB 生产线）。
- 核工业设备及部件包括 ITER 配套设备、核工业领域专用泵以及阀门等。公司相关产品属于业内独创，拥有自主知识产权，技术水平国内领先，同类产品国内尚无竞争对手。
- 民用领域核心产品是用于压力容器行业的真空测控组件。公司牵头研发宽量程小体积可远传真空监测仪表是国内唯一通过国家危化品储运装备技术与信息化工作委员会鉴定和国家防爆所防爆认证的产品，综合性能达到国内领先、国际先进水平。

表 1：公司主要产品简介

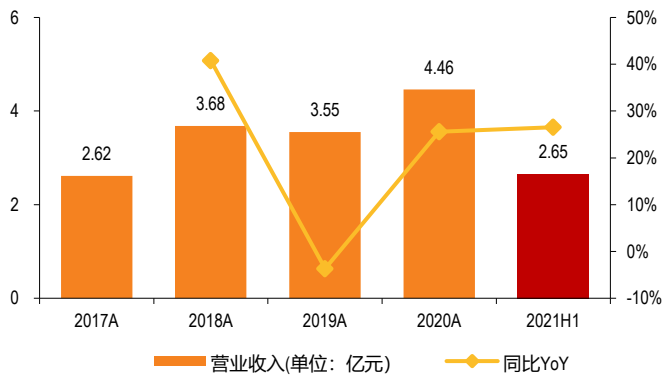
产品类别 (一级)	产品类别 (二级)	产品名称	特点	主要应用领域		
微波器件	微波电真空器件	行波管	高频率、宽频带、大功率，转换效率高	雷达、电子对抗、通信等领域作为微波功率放大的核心器件		
		磁控管	频率覆盖 S 波段至 Ka 波段，最大脉冲功率达到 MW 级	可满足车载、舰载、机载和弹载的要求，主要应用于预警、跟踪、炮瞄、未制导、军用气象雷达等装备，作雷达发射机功率源		
		充气微波开关管	低损耗、低泄露、快速响应，承受功率大、漏过功率小\恢复时间短	预警、跟踪、炮瞄、军用气象雷达等装备作雷达接收机收发转换开关。		
		开关网络	通道任意切换、路间隔离度高、承受功率大、频率覆盖范围广、可靠性高	海军舰载与陆基直升机等配套项目		
	微波固态器件	变频组件	高度集成化、小型化、超宽带、频率覆盖范围广	车载雷达站等配套项目		
		接收前端模块	多通道、小型化、超宽带、频率覆盖范围广	陆军雷达车等配套项目		
		天线接口模块	隔离度高、发射功率高、开关速度快、噪声系数低	空军、海军某机型综合射频系统等配套项目		
		多波束馈电网络	多通道、平坦度好、幅度稳定性好、幅度一致性高、可靠性高	陆军地面雷达等配套项目		
		射频前端模块	增益稳定、平坦度好、杂散抑制高	陆地项目飞机监测系统等配套项目		
		射频交换模块	增益稳定、杂散抑制高、超宽带、频率覆盖范围广	空军无人直升机综合射频系统等配套项目		
		频率源	频谱纯净、性能优良，具有宽频带、微型化、低杂散、低相噪、低功耗、高可靠性	广泛应用于雷达、电子对抗、通信、航空航天等领域		
		固态功率放大器	散热好、功率容量大、可靠性高、频率覆盖范围广，可以实现 X-Ku 频段十千瓦级、Ka 频段千瓦级、Q 频段 300W 级单台固态连续波	地面、机载、舰载火控/干扰雷达、卫星通信等配套项目		
		核工业设备及部件	ITER 配套设备	偏滤器	技术难度大，国际上无可借鉴先例	用于 HL-2M 托卡马克装置
				ITER 屏蔽模块	氦检测仪灵敏度及设备真空室本底漏率在空载状态下均优于 ITER 组织要求，设备的设计、优化、制造、装配、调试，全程实现国产化	对包层屏蔽模块氦气循环的检测
热氦检漏设备						
ITER 包层第一壁板 (FW)	实现良好的热传导以消耗热负荷			限制聚变等离子体、屏蔽高热负荷，从而保护外围设备和部件免受热辐射损伤		
ITER 工艺设备	公司研制出了各种制造及验证装置，包括球床材料测量系统、带高温环境箱的电子万能试验机、多功能快速钎焊炉等工艺设备，用于 ITER 相关的试验、测量及生产工艺之中					
核工业领域专用泵	主轴传动系统采用磁力驱动，泵体无油脂润滑及有机密封材料，因此具备优异的耐辐照性能		气体的循环转移、增压及抽空处理，其耐辐照能力、高压压缩和超低的漏率一直是市面其他产品无法替代的			
核工业领域专用阀门	更强的耐辐照能力以及气密性，整体漏率以及内部漏率均优于现阶段同类阀门	通过顶部传感器接口以及气源快插接口配合使用来控制阀门的通断，控制系统管路中气流的通断				
其他民用产品	压力容器真空测控组件	体积小、真空测量范围宽、测量数据可远传、可快速抽放气体、安装简单、环境适应性强	用于低温绝热压力容器夹层真空度测量与监测的功能产品			
	真空开关及灭弧室	体积小、重量轻、易维护	用于科研、冶金、矿山、石化、建筑等用电系统，控制 12kV、7.2kV 及以下等级的高压电机、变压器及容性负载等			
	民航机载厨房设备	根据中国航空行业标准 MH/T6061-2010《飞机厨房手推车、物品箱及其相关组件的最低设计和性能标准》进行设计，产品均满足中国民用航空技术标准 CTSO-C175《飞机厨房手推车、物品箱及其相关组件》的相关规定，保证所生产的民航产品安全适航，并在动车组上得到广泛应用				

资料来源：公司招股说明书，天风证券研究所

业绩迎来全面蜕变期，利润率水平呈现显著提升趋势

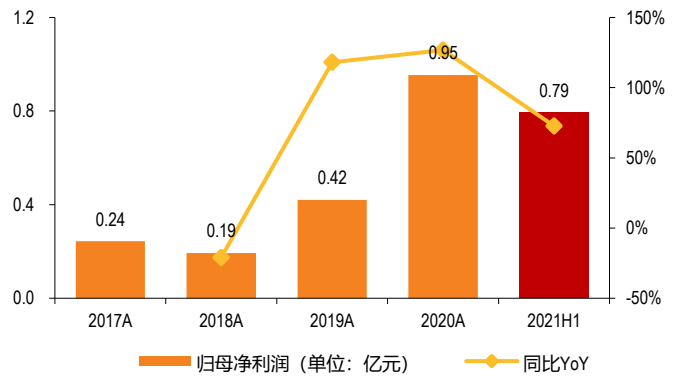
近两年业绩成倍增长，21H1 延续高增速。公司 2020 年实现营业收入 4.46 亿元，同比 +25.61%；实现归母净利润 0.95 亿元，同比+126.77%，自 2018 年业绩出现下滑后连续两年业绩增速超过 100%，18-20 年业绩复合增速达到 122.4%。其中，2020 年，微波器件业务实现营业收入 3.28 亿元（同比+29.29%），占营业收入比重 74.20%，为公司主要收入来源；核工业设备及部件业务实现营业收入 6903.90 万元（同比+78.06%），业务实现快速放量，营收占比为 15.6%。2021H1 公司实现营业收入 2.65 亿元，同比+26.57%；实现归母净利润 0.79 亿元，同比+72.82%，接近 2020 全年业绩水平，全年有望延续高增速。

图 3：2017A-2021H1 营业收入及同比 YoY



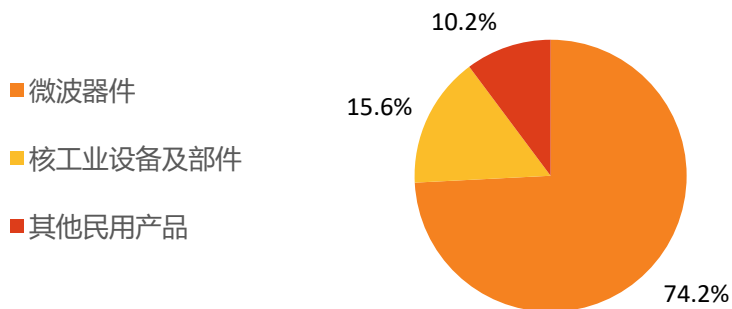
资料来源：Wind，天风证券研究所

图 4：2017A-2021H1 归母净利润及同比 YoY



资料来源：Wind，天风证券研究所

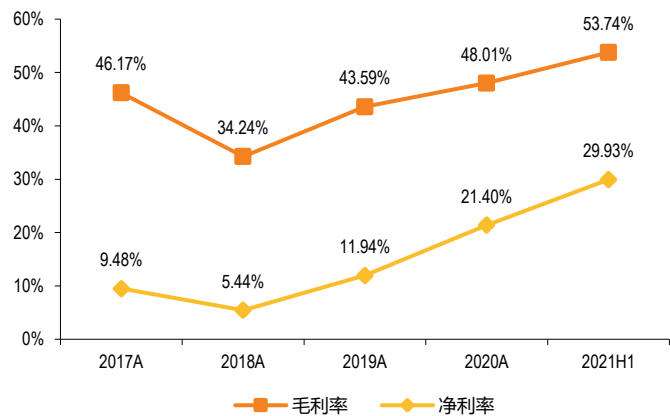
图 5：公司主营业务拆分情况



资料来源：Wind，天风证券研究所

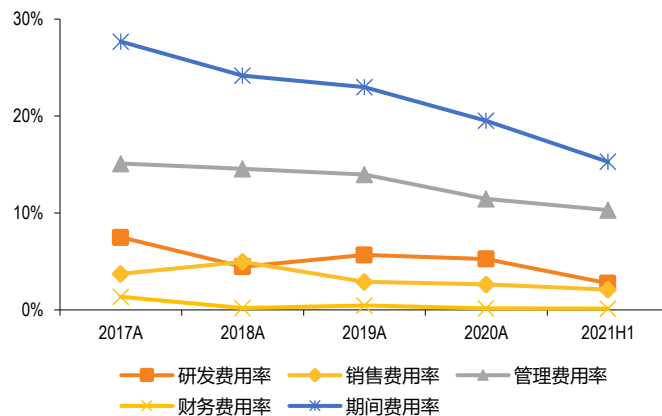
期间费用率显著下降表明费用控制能力增强，利润率呈现持续提升趋势。费用率方面，2020 年期间费用率为 19.51%，相较 2017 年的 27.68%下降 8.17pct，呈现明显下降趋势，并且 21H1 期间费用率仅为 15.28%。期间费用率下降主要原因为管理费用逐年下降明显，管理费用控制能力提升。利润率方面，毛利率、净利率自 2018 年开始逐年提升，2020 年毛利率、净利率分别为 48.01%和 21.40%，21H1 毛利率、净利率再次提升至 53.74%和 29.93%，我们认为主要原因为批量生产提升毛利率并且结构上高毛利率产品占比增加。2018 年由于非主营业务毛利率显著下滑导致整体毛利率下降，整体来看主营业务毛利率维持稳定，并逐年提升。

图 6: 公司 2017A-2021H1 利润率情况



资料来源: Wind, 天风证券研究所

图 7: 公司 2017A-2021H1 期间费用率情况



资料来源: Wind, 天风证券研究所

真空器件核心供应商，微波器件+核工业进入高景气放量阶段

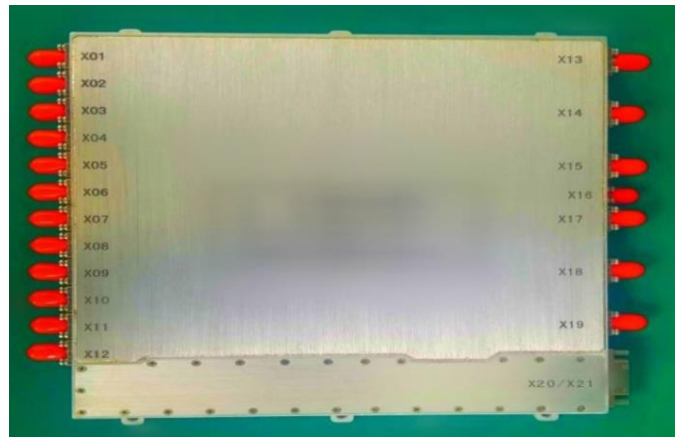
真空器件+固态器件，微波器件业务深度受益于我军信息化、智能化发展。公司微波器件业务主要包含真空微波器件和固态微波器件。**真空器件类**核心产品行波管、磁控管对技术研发、生产管理标准严格，准入门槛高，竞争相对较少，只有国家定点军用微波电真空器件“两厂两所”具备研发生产能力，已自主研发产品 300 余项，为我军地面、车载、舰载、机载、弹载等 200 种武器装备配套。**固态器件类**产品主要包括开关网络、变频组件、射频前端、功放等微波器件、多功能组件及微波分机，产品具有集成度高、体积小、频率覆盖范围广等特点，广泛应用于微波通信、雷达、电子对抗等领域，目前已不同程度上为部分重点工程提供长期配套，未来会承担为多军工配套建设任务。

图 8：公司行波管产品



资料来源：招股说明书，天风证券研究所

图 9：公司固态微波接收前端模块产品



资料来源：招股说明书，天风证券研究所

微波器件广泛应用于雷达、电子对抗、卫星通信等，真空器件行波管在低轨通信卫星中需求显著提升。微波器件主要应用于军事领域，是相控阵雷达、微波通信、电子对抗等军事装备系统的核心。相比固态器件，电真空器件长期保持着在高频段的优势地位，也是实现大功率毫米波的必经之路。其中，行波管是国外对我国进行重点封锁的器件，公司产品性能指标处于国内领先水平，部分产品达到国际先进水平。随着我国低轨卫星项目的不断推进，目前已规划近十个低轨卫星计划，累计规划卫星数量超过 2000 颗，由于卫星通信中的大功率放大器主要采用电真空器件，平均每颗卫星需要配置数只空间行波管，预计未来 5 年我国共需要数万只空间行波管，我们认为公司真空器件产品有望伴随低轨卫星建设进入快速发展阶段。

表 2：国内已公布的部分低轨卫星计划

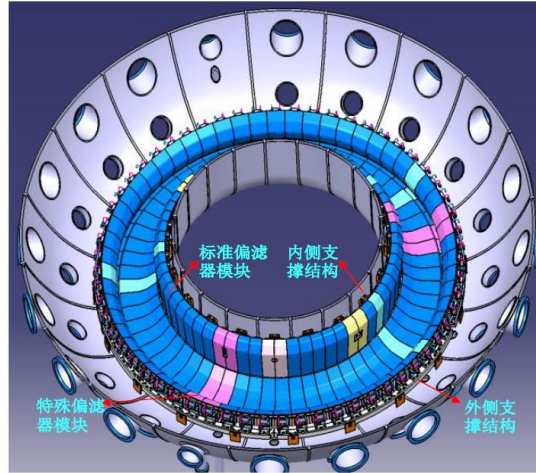
计划名称	卫星数量 (颗)	轨道计划	进展	发起企业
鸿雁星座	300	LEO	2018 年 12 月发射首颗试验星	航天科工集团
虹云工程	156	LEO	2018 年 12 月发射首颗试验星	航天科工集团
行云工程	80	LEO	已于 2020 年 5 月成功发射 2 颗低轨卫星	航天科工集团
天象星座	60+60	LEO	2019 年 6 月试验 1 星、2 星入轨	中国电子科技集团
九天	72	LEO	2018 年 12 月瓢虫系列 7 颗卫星入轨	九天微星
星时代	192	LEO	2019 年 8 月发射微小遥感卫星	国星宇航、天仪研究所
银河 5G	650	LEO	2020 年 1 月 16 日首发星入轨	银河航天
Laserfleet 激光通信航空互联网	288	LEO	2018 年 10 月发射首颗试验星	航星光网、上海光机所
蜂群星座	272	LEO	2019 年 6 月发射连尚一号	连尚网络

资料来源：公司招股说明书，天风证券研究所

ITER 项目零部件配套商，核工业领域或高速发展。公司的核工业设备及部件产品主要包括 ITER 配套设备、核工业领域专用泵以及阀门等。ITER 项目俗称“人造太阳”，是个能产生大规模核聚变反应的超导托卡马克装置，公司目前为其偏滤器、屏蔽模块热氦检漏设备、包层第一壁板 (FW) 供应商。除 ITER 项目外，我国也已建成或在建多个托卡马克装置，公司相关业务或逐渐受益。目前来看，公司核工业产品主要处于小批量量产以及原型机研发阶段，我国核工业领域迫切需要将关键零部件进行自主创新国产化，逐渐摆脱对国外零部件的进口依赖，而核工业领域专用泵、阀门是核聚变实验及应用中不可或缺的重要零部件，我们认为公司核工业领域有望进入快速发展轨道。

- **偏滤器**用于 HL-2M 托卡马克装置，整个先进偏滤器系统共有 60 个偏滤器模块，由 38 套标准偏滤器模块和 22 套非标准偏滤器模块构成。公司承制的 HL-2M 先进偏滤器模块**技术难度大，国际上无可借鉴先例**，须做大量的试验验证进而确定可实现的工艺路线。偏滤器的成功设计制造将为我国的受控热核聚变研究跻身于世界先进行列奠定坚实的基础。

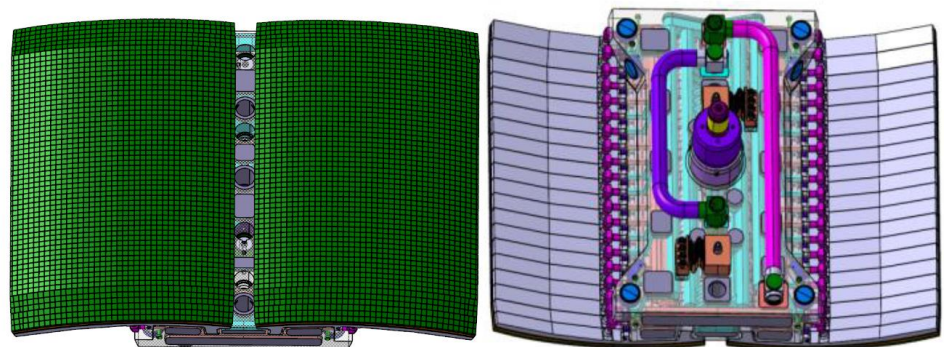
图 10：偏滤器示意图



资料来源：招股说明书，天风证券研究所

- 公司完成制造调试的**真空高温氦检漏设备是全球首台**满足 ITER 要求的包层部件的大型真空高温氦检漏设备，该设备同时具有“真空烘烤”、“去应力热处理”和“热氦气检漏”三大功能。两项重要指标——氦检测仪灵敏度及设备真空室本底漏率在空载状态下均优于 ITER 组织要求，设备的设计、优化、制造、装配、调试，**全程实现国产化**。
- **第一壁板（FW）**是 ITER 屏蔽包层的重要组成部分，是 ITER 的核心部件，其直接面向高温等离子体，在 ITER 中起到限制聚变等离子体、屏蔽高热负荷，从而保护外围设备和部件免受热辐射损伤的作用。**目前，公司参与研制的 ITER FW 已经完成样品制造，进入工艺的验证阶段**。另外，公司已与用户达成了初步合作意向协议，项目于 2020 年内启动，**第一壁板产品 3 年内需要交付 65 套，预计未来三年会带来 10 亿元以上的销售收入**。

图 11：第一壁板示意图



资料来源：招股说明书，天风证券研究所

募投针对真空器件、核工业、压力容器扩产，建成后或显著增厚公司业绩

本次 IPO 募投项目主要包含科研生产综合楼及空天通信技术研发中心建设项目、特种电真空器件生产线项目、核工业领域非标设备及耐 CHZ 阀门产业化建设项目、以及压力容器安全附件产业化建设项目。研发中心项目将重点针对空间行波管、大功率速调管等产品进行基础技术研究及新产品预研，其余三个项目均为产线建设，或显著提升公司相关产品产能，未来有望增厚公司业绩。

表 3：公司募集资金拟投资项目情况（单位：万元）

序号	项目名称	拟投入募集资金金额	建设期
1	科研生产综合楼及空天通信技术研发中心建设项目	18353.41	三年
2	特种电真空器件生产线项目	30360.55	三年
3	核工业领域非标设备及耐 CHZ 阀门产业化建设项目	24801.46	三年
4	压力容器安全附件产业化建设项目	17292.28	三年
合计		90807.70	

资料来源：公司公告，天风证券研究所

国光电气盈利预测及估值

公司深耕微波器件领域，形成真空器件、固态器件双轮驱动，尤其是在真空器件领域优势显著，随着电子对抗、低轨卫星建设推进，微波器件业务有望持续发展，其次核工业领域国产替代需求强烈，ITER 项目以及国内相关项目推进，新拓展核工业领域或保持长期高增速，看好公司持续发展能力。微波器件业务，随着雷达、电子对抗、低轨卫星领域需求持续提升，预计 21-23 年增长率分别为 38%/35%/35%；核工业领域第一壁板产品获得三年 10 亿订单，其余产品也有望持续放量，预计 21-23 年增速分别为 120%/100%/70%。毛利率方面，随着规模效应显现，微波器件 21-23 年毛利率有望提升，预计为 60%/63%/65%；核工业 42%/44%/45%。综上，我们预计 2021-23 年营业收入为 6.61/9.80/14.16 亿元、归母净利润为 1.72/2.99/4.56 亿元，对应 EPS 为 2.23/3.86/5.90 元，对应 PE 为 72.74/42.00/27.48x。

表 4：2021-2023 年公司核心业务预测假设以及收入情况

	2019	2020	2021E	2022E	2023E
关键假设					
微波器件增长率 (%)	10.93%	29.29%	38.0%	35.0%	35.0%
微波器件毛利率 (%)	49.98%	54.40%	60.0%	63.0%	65.0%
核工业增长率 (%)	100.98%	78.08%	120.0%	100.0%	70.0%
核工业链毛利率 (%)	32.24%	34.81%	42.0%	44.0%	45.0%
收入预测					
微波器件收入 (百万元)	254	328	453	612	826
微波器件成本 (百万元)	127	150	181	226	289
微波器件毛利 (百万元)	127	179	272	385	537
核工业收入 (百万元)	39	69	152	304	516
核工业成本 (百万元)	26	45	88	170	284
核工业毛利 (百万元)	13	24	64	134	232

资料来源：Wind，天风证券研究所

表 5：2021-2023 年公司盈利预测

	2019	2020	2021E	2022E	2023E
营业收入(百万元)	354.94	445.85	660.76	979.61	1,415.99
增长率(%)	(3.66)	25.61	48.20	48.26	44.55
净利润 (百万元)	42.07	95.41	172.42	298.60	456.43
增长率(%)	118.16	126.77	80.73	73.18	52.85
EPS (元/股)	0.54	1.23	2.23	3.86	5.90
市盈率 (P/E)	298.09	131.45	72.74	42.00	27.48

资料来源：Wind，天风证券研究所

采用 PEG 法估值进行目标价预测。由于公司业绩有望实现大幅提升，正处于快速成长期，可按照 PEG 法进行估值。选取国防信息化中上游配套企业盟升电子、智明达、睿创微纳作为可比公司，其 21 年 PEG 分别为 1.18/1.47/1.77，均值为 1.55。根据可比公司 21 年 PEG 均值以及公司未来稳态业绩复合增速 40% 计算合理 PE，按照 60X 估值测算 2022 年市值空间为 180 亿元，目标价为 232 元，给予“买入”评级。

表 6：可比公司 2021 年 PEG (时间截至 2021/9/3)

证券代码	公司简称	主营业务	2021 年 PEG 均值
688311.SH	盟升电子	卫星导航、卫星通信	1.18
688636.SH	智明达	嵌入式计算机	1.47
688002.SH	睿创微纳	非制冷红外探测器、机芯、整机	1.77
	平均值		1.55

资料来源：Wind，天风证券研究所

风险提示

1、客户集中度较高风险。我国军工企业普遍具有客户集中的特征。武器装备的最终用户为军方，而军方的直接供应商主要为各大军工集团，其余的涉军企业则主要为各大军工集团提供配套供应。由于各大军工集团业务的侧重领域不同，导致相应领域的配套企业销售集中度较高。2020年，公司前五大客户销售额占营业收入的比例分别为 59.33%、70.23%和占比较高，第一大客户销售额占营业收入的比例分别为 30.90%、37.83%及 36.81%，占比较高。如果未来公司无法在其主要客户的供应商体系中持续保持优势，无法继续维持与主要客户的合作关系，则公司的经营业绩将受到较大影响。

2、技改专项拨款资金债务偿还可能影响公司现金流的影响。截至目前，公司仍存 4 项因技改国家专项拨款资金形成的长期负债，金额为 1.06 亿元。虽然有权部门未提出过偿付要求，但是如果未来公司需要偿付相关资金，短期内支付大额款项可能会对公司的现金流造成一定的不利影响。

3、新产品研发风险、第一壁（FW）和核用泵产品量产风险。产品研发、量产存在不确定性，可能导致公司业绩不达预期。

4、短期内股价波动风险。该股为次新股，流通股本较少，存在短期内股价大幅波动风险。

Financial forecast summary

Balance Sheet (RMBm)						Income statement (RMBm)					
	2019	2020	2021E	2022E	2023E		2019	2020	2021E	2022E	2023E
Cash and Cash Equivalents	105.82	151.81	107.77	100.37	137.88	Revenue	354.94	445.85	660.76	979.61	1,415.99
Trade, Notes and Other receivables	272.80	373.31	492.33	741.92	1,042.15	Cost of Sales	200.23	231.79	311.69	444.51	628.34
Prepayments	4.08	4.21	5.08	9.27	11.22	Business Taxes and Surcharges	2.06	2.01	4.21	5.44	7.75
Inventories	158.29	163.68	273.30	328.06	609.52	Operating Expenses	10.30	11.74	18.50	27.22	35.40
Other Current assets	48.51	6.68	84.30	47.51	104.25	Administrative Expenses	49.55	51.10	75.33	102.86	127.44
Total Current Assets	589.51	699.69	962.78	1,227.13	1,905.01	R&D Expenses	20.11	23.43	39.65	53.88	70.80
Long-Term Equity Investments	0.00	0.00	0.00	0.00	0.00	Financial Expense	1.60	0.72	0.31	(0.50)	(0.57)
Non-Current Assets	137.04	145.93	161.91	197.96	233.05	Impairment Losses	(7.50)	(8.87)	(0.61)	(5.66)	(5.05)
Construction-In-Progress	17.39	0.10	36.06	69.64	71.78	Gain/(loss) of Fair Value Change	(9.47)	0.00	9.23	2.81	(4.95)
Intangible Assets	7.18	6.98	6.78	6.59	6.39	Net Investment Income	(1.69)	5.11	(5.16)	(0.58)	(0.21)
Other Current assets	21.50	18.69	17.83	18.25	17.29	Other Current assets	41.17	15.62	(8.13)	(4.45)	10.32
Total Non-Current Assets	183.11	171.70	222.59	292.43	328.51	Operating income	48.58	113.21	215.75	354.09	546.72
Total Assets	772.62	871.38	1,185.37	1,519.56	2,233.52	Non-Operating Revenue	0.06	0.11	0.10	0.09	0.10
Short-Term Loan	0.00	30.00	0.00	0.00	0.00	Non-Operating Expenses	0.08	2.74	1.14	1.32	1.73
Trade Payables and Other Payables	56.43	107.95	107.72	214.38	230.87	Profit Before Tax	48.55	110.59	214.71	352.86	545.08
Other Current assets	91.29	75.01	227.53	157.78	399.21	Income Taxes	6.17	15.18	42.28	54.26	88.66
Total Current Liabilities	147.73	212.97	335.25	372.16	630.08	Net Profit	42.38	95.41	172.42	298.60	456.43
Long-Term Loan	0.00	0.00	0.00	0.00	0.00	Net Profit Attributable to NCI	0.31	0.00	0.00	0.00	0.00
Bonds Payable	0.00	0.00	0.00	0.00	0.00	Net Profit Attributable to The Parent	42.07	95.41	172.42	298.60	456.43
Other Current assets	109.84	106.21	110.01	108.69	108.30	EPS (RMB)	0.54	1.23	2.23	3.86	5.90
Total Non-Current Liabilities	109.84	106.21	110.01	108.69	108.30						
Total Liabilities	257.57	319.18	445.26	480.84	738.38						
Non-Controlling Interest	0.00	0.00	0.00	0.00	0.00	Financial ratio	2019	2020	2021E	2022E	2023E
Share Capital	58.06	58.06	77.42	77.42	77.42	Growth					
Capital Reserves	336.69	336.69	336.69	336.69	336.69	Revenue	-3.66%	25.61%	48.20%	48.26%	44.55%
Retained Earnings	454.86	490.27	662.69	961.29	1,417.72	Operating income	60.75%	133.05%	90.57%	64.12%	54.40%
Other Current assets	(334.56)	(332.81)	(336.69)	(336.69)	(336.69)	Net Profit Attributable to The Parent	118.16%	126.77%	80.73%	73.18%	52.85%
Total Equity	515.05	552.20	740.11	1,038.72	1,495.14	Profitability					
Total Equity and Liabilities	772.62	871.38	1,185.37	1,519.56	2,233.52	Gross Profit Margin	43.59%	48.01%	52.83%	54.62%	55.63%
						Net Profit Margin	11.85%	21.40%	26.10%	30.48%	32.23%
						ROE	8.17%	17.28%	23.30%	28.75%	30.53%
						ROIC	11.75%	27.24%	42.15%	49.44%	50.36%
						Solvency					
Cash Flow Statement (RMBm)	2019	2020	2021E	2022E	2023E	Debt to Asset Ratio	33.34%	36.63%	37.56%	31.64%	33.06%
Net Profit	42.38	95.41	172.42	298.60	456.43	Net Debt Ratio	-20.55%	-22.06%	-14.56%	-9.66%	-9.22%
Depreciation & Amortization	16.88	17.06	8.25	10.57	12.96	Current Ratio	3.99	3.29	2.87	3.30	3.02
Financial Expense	1.95	0.94	0.31	(0.50)	(0.57)	Quick Ratio	2.92	2.52	2.06	2.42	2.06
Investment Gain/(Loss)	1.69	(5.11)	5.16	0.58	0.21	Operation					
Change of Working Capital	(15.84)	(51.48)	(140.97)	(233.77)	(386.83)	Receivable Turnover Ratio	1.32	1.38	1.53	1.59	1.59
Others	23.90	(19.50)	9.23	2.81	(4.95)	Inventory Turnover Ratio	2.21	2.77	3.02	3.26	3.02
Cash Flows from Operating Activities	70.96	37.33	54.41	78.30	77.26	Asset Turnover Ratio	0.45	0.54	0.64	0.72	0.75
CapEx	23.93	11.53	56.20	81.32	50.39	Indicator Per Share					
Long Term Investments	0.00	0.00	0.00	0.00	0.00	EPS	0.54	1.23	2.23	3.86	5.90
Other Current assets	(12.47)	28.15	(139.82)	(167.52)	(90.70)	Operating Cash Flow Per Share	0.92	0.48	0.70	1.01	1.00
Cash Flows from Investing Activities	11.45	39.68	(83.62)	(86.20)	(40.32)	Net Asset Per Share	6.65	7.13	9.56	13.42	19.31
Proceeds from Issuance of Debt	0.00	30.00	0.00	0.00	0.00	Valuation					
Proceeds from Issuance of Equity	(80.98)	2.53	16.67	2.00	2.07	PE	298.09	131.45	72.74	42.00	27.48
Other Current assets	5.68	(63.47)	(31.50)	(1.50)	(1.50)	PB	24.35	22.71	16.95	12.07	8.39
Cash flows from financing activities	(75.29)	(30.93)	(14.83)	0.50	0.57	EV/EBITDA	0.00	0.00	55.31	34.08	22.14
Impact of FX	0.00	0.00	0.00	0.00	0.00	EV/EBIT	0.00	0.00	57.43	35.10	22.67
Net increase (decrease) in cash, cash equivalents and restricted cash	7.12	46.07	(44.04)	(7.40)	37.51						

Source: Company data, Tianfeng Securities estimate

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Investment Ratings

Category	Description	Ratings	System
Stock investment ratings	within 6 months from the report issuance date, increase or decrease relative to the Index of the jurisdiction of the Stock in the same period	Buy	Expected relative return over stock price above 20%
		Accumulate	Expected relative return over stock price between 10% and 20%
		Neutral	Expected relative return over stock price between -10% and 10%
		Sell	Expected relative return over stock price below -10%
Industry investment ratings	within 6 months from the report issuance date, increase or decrease relative to the Index of the jurisdiction of the Industry in the same period	Outperform	Expected increase of industry index over 5%
		Neutral	Expected increase of industry index between -5% and 5%
		Underperform	Expected increase of industry index below -5%

Jurisdictions	Index Used for Ratings Definitions
China Mainland	CSI 300 Index
China-Hong Kong	Hang Seng Index
China-Marco	Hang Seng Index
USA	Standard & Poor's 500 Index

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