

工信部：坚持适度超前建设数字基础设施；
1-4月“云+数”行业收入高增

MIIT: Adhere to the Moderately Advanced Construction of Digital Infrastructure;
January-April 2022 "Cloud + Digital" Industry Revenue Increased Steadily

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破旧立新，困境反转，5G产业链格局重塑

●**破旧立新，5G建设深化，产业格局重塑**：自2019年6月6日5G牌照发放以来，5G网络已经初步实现重点城市覆盖，5G用户量快速提升。**国产设备商**份额不断提升并加速上游布局，网络升级背景下**产业数字化**加速推动，催化**网络安全**等需求提升。下游元宇宙应用等拉动网络升级，大通信板块有望迎来业绩和估值双升阶段。

●**困境反转，5G配套需求向上，上游涨价压力趋缓**：以5G应用为牵引，相关配套需求稳步增长，21年上游涨价、成本端压力放大驱动产能加速出清和龙头地位增强。**PCB、光纤光缆行业**22年反转趋势有望显现。**军工信息化**景气度向上，并推动**通信终端产业链关键元器件**迎来发展的黄金时代。

云网发力，产业数字化快速增长

核心推荐：紫光股份、华工科技、沪电股份、天孚通信；亿联网络、广和通；长光华芯、紫光国微等。

●我们判断2022年通信行业正处于“破旧立新”的变化中，行业发展向上，头部企业估值历史底部，看好行业整体潜在机会：

1、云计算产业链需求景气——随着2022年全球数据中心资本开支预计较快增长、国内运营商加大网络&云业务投资，产业链重点公司有望持续受益，其中：**1) 设备端：重点关注紫光股份、星网锐捷、中兴通讯、迪普科技等；2) 运营商：重点关注中国移动，关注中国电信、中国联通等。3) 上游核心器件：光器件——建议重点关注华工科技、天孚通信、中际旭创等，关注光库科技、光迅科技等；光纤缆——建议关注：中天科技、亨通光电；PCB——重点关注沪电股份、深南电路，关注生益电子等。**

2、行业数字化持续加速——**1) 工业互联网**：国内工业互联网已具发展天时、地利、人和，把握产业升级红利，核心智能装备、工业互联网平台等将迎来快速发展机会，**建议关注：中控技术、奥普特等。****2) AIoT**：AIoT行业需求持续高景气、估值尚不高，头部标的势能更强，**建议重点关注：广和通、移远通信、四方光电、华测导航、亿联网络**，关注：和而泰、拓邦股份等。**3) 激光先进制造长期趋势向好**——建议重点关注：**华工科技、长光华芯**，关注光库科技、杰普特、大族激光、锐科激光等。

3、通信芯片崛起，受益国产化浪潮——通信芯片公司近年来不断加大研发投入提高产品自主性，实现了关键领域的领先布局，**建议重点关注：紫光国微（国内特种芯片行业龙头）、中瓷电子（氮化镓业务国内领先，成长空间广阔）等**，同时建议关注国内基带通信芯片、接入端通信芯片、光芯片相关公司。

风险提示：市场的系统性风险&预期外的中美科技摩擦事件。

合规提示：根据公司2021年年度报告披露，海通证券自营持有【688665 四方光电】超过总股本1%。

For full disclosure of risks, valuation methodologies and target price formation on all HTI rated stocks, please refer to the latest full report on our website at equities.htisec.com

工信部部长：坚持适度超前建设数字基础设施，全面推进5G&千兆光网建设



- **工信部部长：坚持适度超前建设数字基础设施。**根据人民网报道，5月26日，在2022年中国国际大数据产业博览会开幕式上，工业和信息化部部长肖亚庆表示，要坚持适度超前建设数字基础设施，全面推进5G网络和千兆光网建设，加快工业互联网、车联网等布局。其中，具体措施上，肖部长提出要统筹布局数据与算力设施，加快建设国家工业互联网大数据中心，合理部署超级计算中心，打造若干国家大数据枢纽节点和区域中心集群；要构建多层次工业互联网平台体系，培育一批专业化、场景化大数据解决方案，发展一批面向细分场景的工业APP，推广一批基于数据驱动的新技术新业态新模式。
- **工信部发布2022年1-4月通信业经济运行情况。**根据C114通信网公众号援引工信部数据，2022年1-4月中国电信业务收入5292亿元，同比增长8.8%。其中互联网宽带业务收入797.4亿元，同比增长9.6%；移动数据流量业务收入2180亿元，同比增长1.3%。新兴业务收入1039亿元，同比增长35%。其中云计算和大数据收入分别同比增长132.6%和57.3%，数据中心业务收入同比增长19.2%，物联网业务收入同比增长24.5%。
- **中国移动公示2022-2023年部分智能家庭网关产品采购中标候选人。**根据中国移动官网，中国移动公示了2022-2023年智能家庭网关产品集采项目(第一批次)公开采购第二部分的集采结果，共有中兴通讯、中国移动终端公司、深圳创维、烽火通信、星网锐捷、九联科技等6家厂商中标第二部分标包。第二部分共计采购智能家庭网关产品535万台，包括：采购包三（10G GPON-WiFi6）400万台和采购包四（10G GPON-无WiFi）135万台。
- **中国移动公示2021-2022年部分PC服务器采购中标候选人。**中国移动公布2021-2022年PC服务器集中采购第二批次（标包1-6）中标候选人，本期采购规模约为47845台，划分6个标包，本次仅公示标包1，标包2-6尚未完成评审。标包1包含3.5万台服务器，中标厂商为浪潮信息、中兴、新华三、超聚变、曙光信息，平均投标报价近40亿元。

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◆ 光库科技：2022年限制性股票激励计划(草案)

拟授予高级管理人员、核心管理人员及核心技术（业务）人员等171名激励对象限制性股票公237.10万股，占公司总股本1.44%，授予价格为12.67元/股。业绩考核目标为2022/2023/2024年： 1）公司EPS不低于0.80/1.05/1.31元/股且不低于同行业平均；2）营业收入相对于2021年增长率不低于20%/50%/80%；3）销售商品、提供劳务收到的现金占营业收入比重均不低于91%且不低于同行业平均。

◆ 华工科技：关于间接控股股东增持公司股份及后续增持计划的公告

公司间接控股股东武汉商贸集团5月25日-26日以自有资金增持公司股票248.96万股，占总股本的0.25%。同时，6个月内计划累计增持503万-1006万股。

◆ 长光华芯：关于相关股东延长股份锁定期的公告

截至2022年5月5日收市，公司股票已连续20个交易日收盘价低于发行价格80.80元/股，股东于发行前直接或间接持有公司股份的锁定期自动延长六个月。

表1: 5月通信行业模拟投资组合 (组合标的: 紫光股份20%、中天科技20%、华工科技20%、华测导航10%、四方光电10%、广和通10%、星网锐捷10%)

所属板块	公司简称	权重	股价 (元)	市值 (亿元)	2021 EPS (元)	2022E EPS (元)	2023E EPS (元)	2022E PE (倍)
ICT网络设备龙头	紫光股份	20%	17.38	497	0.75	0.94	1.21	18
光纤光缆	中天科技	20%	17.76	606	0.05	1.10	1.35	16
光器件及激光设备	华工科技	20%	19.90	200	0.76	1.05	1.42	19
北斗卫星导航	华测导航	10%	33.96	129	0.77	1.16	1.74	29
气体传感及分析仪器	四方光电	10%	122.06	85	2.57	3.91	5.13	31
物联网和移动互联网	广和通	10%	22.40	139	0.65	1.35	1.85	17
ICT网络设备龙头	星网锐捷	10%	21.45	125	0.94	1.38	2.03	16

资料来源: WIND, HTI

注: 市值与2022E PE根据5月27日收盘价计算, 2022、2023E EPS为HTI预测

合规提示: 根据公司2021年年报披露, 海通证券创新证券子公司持有【688665 四方光电】超过总股本1%。

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- 上周（5月23日-5月27日），WIND通信板块下跌1.26%，投资组合个股平均下跌0.67%，组合收益下跌0.02%（含权重）。月初至今，WIND通信板块上涨3.47%，投资组合个股平均上涨9.79%，组合收益上涨9.76%（含权重）。

表2: 通信行业模拟投资组合行情回顾（5月份组合）

股票代码	公司简称	权重	上周涨跌幅 (%)	5月以来涨跌幅 (%)
000938.SZ	紫光股份	20%	-2.19	2.24
600522.SH	中天科技	20%	1.60	8.62
000988.SZ	华工科技	20%	5.12	18.24
688025.SH	星网锐捷	10%	-1.11	-1.38
300627.SZ	华测导航	10%	-1.54	4.78
688665.SH	四方光电	10%	-5.58	24.88
300638.SZ	广和通	10%	-1.02	11.12
组合个股涨幅平均			-0.67	9.79
月度模拟投资组合平均			-0.02	9.76
Wind通信板块			-1.26	3.47

资料来源：WIND（收盘价截至5月27日），HTI

合规提示：根据公司2021年年报披露，海通证券创新证券子公司持有【688665 四方光电】超过总股本1%。

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- 上周 (5月23日-5月27日)，上证指数下跌**0.52%**，深证成指下跌**2.28%**，创业板综下跌**3.01%**，中小综指下跌**8.99%**，WIND通信板块下跌**1.26%**。
- 年初至今，细分板块中涨跌幅前三为光纤缆、运营商、工业互联网，分别**-7.78%**、**-10.94%**和**-18.46%**。上周 (5月23日-5月27日)，细分板块中涨跌幅前三为光纤缆、主设备、运营商，分别**+2.43%**、**+0.25%**、**-0.34%**。

图1: 指数表现

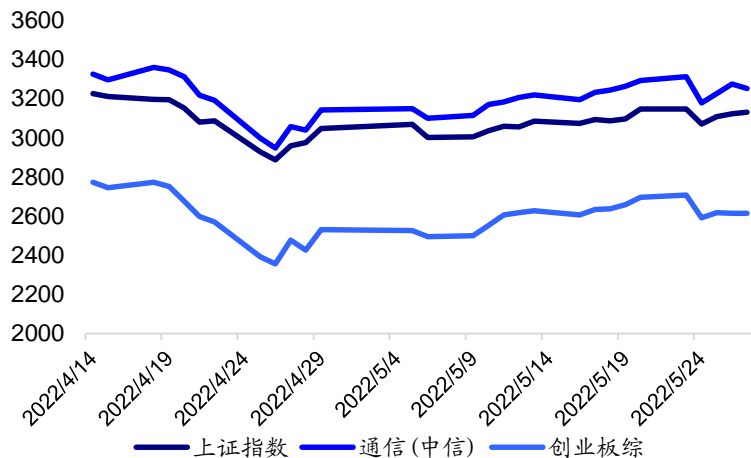


表3: 通信行业细分板块表现

板块	运营商	主设备	光纤缆	光模块	激光行业	PCB相关
年初至今涨幅	-10.94%	-24.71%	-7.78%	-31.55%	-34.98%	-23.51%
上周涨幅	-0.34%	0.25%	2.43%	-0.77%	-2.73%	-3.29%
板块	IDC	物联网	工业互联网	信息安全	军工安全	
年初至今涨幅	-25.73%	-35.49%	-18.46%	-51.15%	-19.44%	
上周涨幅	-2.40%	-0.55%	-1.53%	-3.21%	-1.08%	

资料来源: WIND (数据截至2022年5月27日), HTI
注: 细分板块涨跌幅按公司市值权重计算

- A股通信板块，超讯通信、东信和平、德生科技、特发信息、武汉凡谷等涨跌幅居前。
- 美股TMT市场，福尼克斯、威睿、戴尔科技、ZOOM VIDEO COMMUNICATIONS、LENDINGCLUB等涨跌幅居前。
- 港股TMT市场，中芯国际、建滔集团、VTECH HOLDINGS、京东方精电、中兴通讯等涨跌幅居前。

表4：全球主要市场周涨幅排行

A股通信涨跌幅前五			美股TMT涨跌幅前五			港股TMT涨跌幅前五		
603322.SH	超讯通信	23.18%	PLAB.O	福尼克斯	39.64%	00981.HK	中芯国际	6.02%
002017.SZ	东信和平	12.49%	VMW.N	威睿	35.05%	00148.HK	建滔集团	4.65%
002908.SZ	德生科技	12.03%	DELL.N	戴尔科技	23.80%	00303.HK	VTECH HOLDINGS	3.45%
000070.SZ	特发信息	10.86%	ZM.O	ZOOM VIDEO COMMUNICATIONS	23.04%	00710.HK	京东方精电	3.25%
002194.SZ	武汉凡谷	9.78%	LC.N	LENDINGCLUB	19.57%	00763.HK	中兴通讯	2.73%

注：美股、港股分别选取市值10亿美元、50亿港币以上的公司纳入统计
资料来源：WIND（收盘价截至2022年5月27日），HTI

风险提示：市场的系统性风险&预期外的中美科技摩擦事件。

Summary

- **Breaking the old, reversing the dilemma, and reshaping the 5G industry chain pattern**
- **Cloud network exerts force, the rapid growth of industry digitalization**
- **Minister of Industry and Information Technology: insist on building digital infrastructure moderately in advance, and comprehensively promoting the construction of 5G & gigabit optical network**
- **Risk: Systemic risks in the market & unexpected Sino-US technological friction events.**

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Haitong expects to receive, or intends to seek, compensation for investment banking services in the next three months from 0981.HK.

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Haitong has received compensation in the past 12 months for products or services other than investment banking from 海通资管 - 工行 - 陕西烽火通信集团有限公司, 陕西烽火通信集团有限公司 and 江西一诺新材料有限公司.

海通担任0941.HK, 0728.HK, 000063.CH, 0285.HK, 0981.HK, 0968.HK 及 0763.HK有关证券的做市商或流通量提供者。

Haitong acts as a market maker or liquidity provider in the securities of 0941.HK, 0728.HK, 000063.CH, 0285.HK, 0981.HK, 0968.HK and 0763.HK.

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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.

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Analyst Stock Ratings

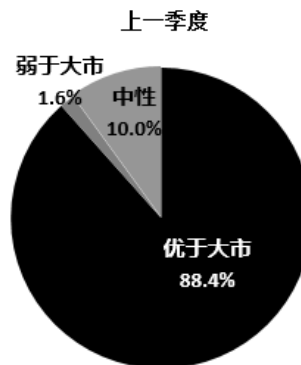
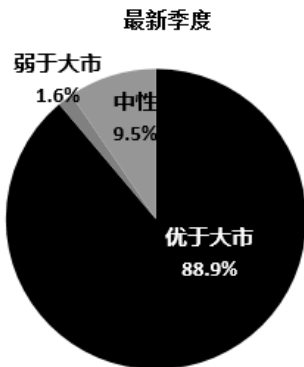
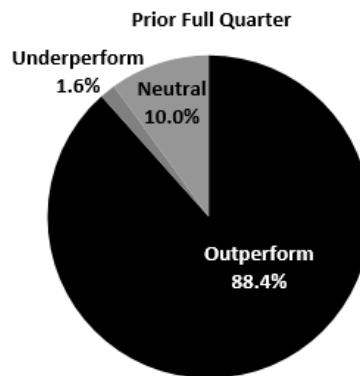
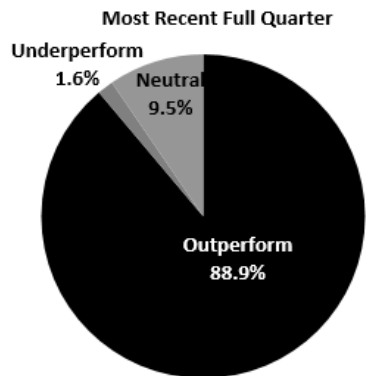
Outperform: The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

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2022年3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	88.9%	9.5%	1.6%
投资银行客户*	6.8%	5.8%	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 Mar 31, 2022

	Outperform	Neutral (hold)	Underperform
HTI Equity Research Coverage	88.9%	9.5%	1.6%
IB clients*	6.8%	5.8%	0.0%

*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.

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Previous rating system definitions (until 30 Jun 2020):

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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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