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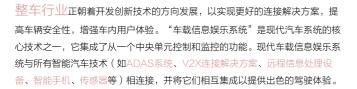
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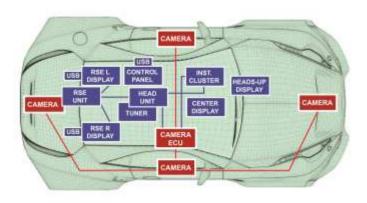
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车载信息娱乐系统知多少

作者: ANSHUL SAXENA 翻译: Urbanus

随着对豪华、安全和智能汽车的需求不断增长,汽车制造商 越来越多地开发集成信息娱乐系统的汽车,这些系统将娱乐 和信息结合起来,以增强车内体验。这篇文章让您了解什么 是车内信息娱乐系统,并了解在幕后工作的各种功能和组件。





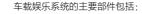
什么是车载娱乐系统?

车载娱乐系统是车辆系统的组合,这些系统通过音频/视频接口、触摸屏显示器、按钮面板、语音命令等控制元件向驾驶员和乘客提供娱乐和信息。

据MarketsandMarkets统计,到2022年,车载娱乐系统市场预计将达到304.7 亿美元,复合年增长率为11.79%。研究表明,车载娱乐系统市场是由汽车产量的增长、技术进步、远程信息处理法规以及对豪华车日益增长的需求驱动的。

车载信息娱乐系统如何工作?

车内信息娱乐系统与许多其他车内和外部系统集成,为驾驶员和乘客提供娱乐和信息。



集成式主机: 车载信息娱乐主机是一种基于触摸屏的平板式设备, 安装在车辆仪表板上。通过用户友好的人机界面, 主机作为信息娱乐系统完美连接的控制中心。

平视显示: 汽车平视显示屏是高端信息娱乐系统的一个组成部分,它将车辆的实时信息显示在与车辆挡风玻璃集成的透明屏幕上。抬头显示有助于减少驾驶员在驾驶时的分心,并帮助驾驶员了解关键细节,如速度、导航地图、电子数字集群(来自车辆车载诊断端口II的信息)、气候、多媒体选项等。

支持多种显示器的高端DSP和GPU: 新时代信息娱乐

系统由为高级IVI系统设计的强大汽车处理器提供动力。这些汽车处理器能够在多个显示器上显示内容(例如抬头显示器或挡风玻璃、连接的智能手机、主机等),并为驾驶员和乘客提供增强的车内体验。操作系统:车载信息娱乐系统要求操作系统能够支持连接、便利功能和可下载软件应用程序,以便在系统中集成新功能。Android、Linux、QNX、Windows等操作系统在信息娱乐领域处于领先地位。CAN、LVDS和其他网络协议支持(根据需要):信息娱乐系统中的电子硬件组件与某些标准化通信协议(如CAN(控制器局域网)互连。CAN或任何其他网络协议支持允许微控制器和设备在没有主机的应用程序中彼此通信。

连接模块:信息娱乐系统包括GPS、Wi-Fi和蓝牙模块,以提供与外部网络和设备的连接。这些模块有助于建立导航、互联网连接和智能手机与信息娱乐系统的集成等服务。

汽车传感器集成:接近传感器、用于检测环境光的手势识别传感器、摄像头传感器和许多其他车内传感器与信息娱乐系统集成,为驾驶员和乘客提供安全相关信息。

数字仪表盘: 高科技信息娱乐系统已将汽车驾驶舱设计从车载仪表的静态显示转变为数字仪表盘。数字仪表盘包括车辆中传统模拟仪表的数字显示,如速度表、转速计、里程表等。数字仪表盘通过OBD端口川从车辆ECU单元获取信息,并显示在信息娱乐系统的显示屏上。作为数字驾驶舱系统的一部分,仪表盘与车辆的其他数字接口集成,如主机、抬头显示器(HUD)HVAC和信息娱乐系统。

*资料来源于einfochips.com

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Everything You Need to Know About In-Vehicle Infotainment Systems

Written by ANSHUL SAXENA



What is In-vehicle infotainment?

The IVI can be described as a combination of vehicle systems which are used to d eliver entertainment and information to the driver and the passengers through au dio/video interfaces, control elements like touch screen displays, button panel, v oice commands, and more.

According to MarketsandMarkets, the in-vehicle infotainment market is estimated to reach USD 30.47 billion by 2022, at a CAGR of 11.79%. Research suggests that invehicle infotainment market is driven by the increase in vehicle production, techn ological advancements, telematics regulations, and increasing demand for luxury vehicles.

How does an In-vehicle Infotainment System work?

In-vehicle infotainment works in integration with many other in-vehicle and external systems to deliver entertainment and information to the driver and passengers.

*The source is from einfochips.com



The main components of an in-vehicle infotainment systems ar e:

Integrated Head-Unit: In-vehicle infotainment head u nit is a touch screen based, tablet-like device, mounted on the vehicle's dashboard. With user friendly HMI, the head unit acts as a perfectly connected control center for the infotainment sy stem.

Heads-Up Display: Automotive heads-up display is an in tegral part of high-end infotainment systems, which displays the vehicle's real-time information on the transparent screen integrated with the vehicle's windshield. Heads-up display helps in reducing the driver's distraction while driving and assists him with key details like speed, navigation maps, electronic digital cluster (information from vehicle's OBD port-II), climate, multimed ia options, etc.

High-end DSPs and GPUs to support multipl

e displays: New age infotainment systems are powered by powerful automotive processors designed for advanced IVI systems. These automotive processors are capable of displaying content on multiple displays (e.g. Head-up Display or Windshield, Connected smartphones, Head Unit, and more) and delivers an enhanced in-vehicle experience to drivers and passengers.

Operating Systems: In vehicle infotainment systems re quire operating systems that are capable of supporting connect ivity, convenience functions, and downloadable software applic ations to integrate new functions in the system. Operating syst ems like Android, Linux, QNX, Windows are leading the infotain ment segment.

CAN, LVDS and other network protocol sup port (as per the requirement): The electronic hardw are components in infotainment systems are interconnected with certain standardized communication protocols such as CAN (Controller Area Network). CAN or any other network protocol support allows microcontrollers and devices to communicate with each other in applications without the host computer.

Connectivity Modules: Infotainment systems encomp ass GPS, Wi-Fi, and Bluetooth modules to provide connectivity with external networks and devices. These modules help in esta blishing services like navigation, internet connectivity and smar tphone integration with the infotainment system.

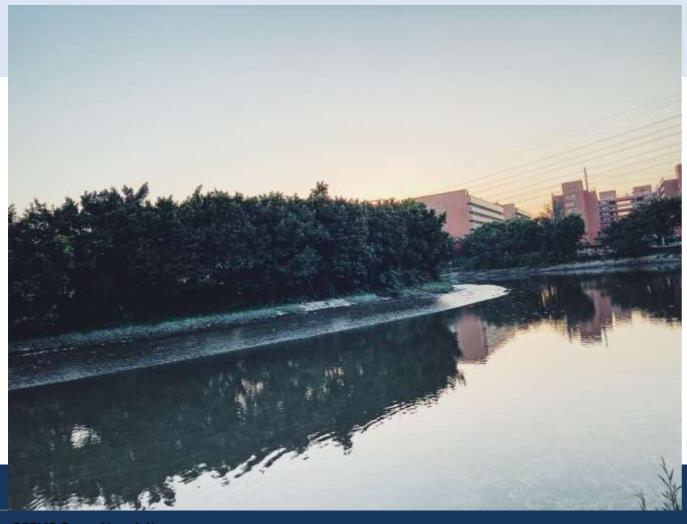
Automotive Sensors Integration: Proximity sensor s, gesture recognition sensors for detecting ambient light, cam era sensors and many other in-vehicle sensors integrate with in fotainment systems to provide safety-related information to the driver and passengers.

Digital Instrument Cluster: Hi-tech infotainment syst ems have transformed the automotive cockpit designs from sta tic displays of the in-vehicle instruments to digital instrument clusters. Digital instrument clusters include digital displays of the traditional analog gauges in the vehicle like speedometer, RPM, odometer, etc. Digital instrument clusters fetch information from the vehicle ECU unit via OBD port-II and displays in the display screen of the infotainment system. Being a part of the digital cockpit system, the instrument cluster is integrated with other digital interfaces of the vehicle like Head Unit, Heads-up Display (HUD) HVAC and Infotainment systems.

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保税区的古运河—— 鹿步涌

撰文: Urbanus



位于三希科技集团广上科技有限公司厂区旁的河流,宽阔而静谧,弯弯曲曲不断延伸,从保税大桥下流过,绕过广上和广合厂房的边缘,潺潺而过,再经过广上的宿舍区,开发大道的大桥横跨而上,缓缓往南湾村和南海神庙而去,最后在电厂注入珠江干流。这条河构成了广州保税区和开发西区其他区域的自然分界线,在地图上,它有一个名字叫做路潛涌。潛是广东话河涌的意思,路是鹿的讹音,来源于保税区附近的鹿步村,然而这条河在当地有着更知名的名字叫做"鹿步涌"或"鹿步滘"。从河流本身样貌来看,似乎让人觉得这是一条天然河流。不过,因为这条河沟通了由东而来的东江干流和由西而来的珠江干流,这样的情况很明显带着人工开凿的痕迹,所以鹿步涌其实是古代由官方主持开凿的一条人工运河,其开凿时间可以追溯到九百多年以前。

在现在的南海神庙所在之处,在古代是一个被称为"扶胥"的地方,曾经是广州的外港和首要停泊处,也是现在黄埔港的前身。自汉代以来的两干多年,广州一直是中国南方最重要的对外贸易的港口。位于珠江边的扶胥港既是一个货物进出内陆的中转站,也是商旅南来北往的交通要道。

离南海神庙不远的广上科技,隶属于广州保税区和开发西区的范围,处于珠江干流和东江的交汇处,从地形上看是一个倒三角的形状,倒三角形的顶角就是两江的交汇点。在未开凿鹿步涌运河之前,那些东江上游的居民,来自增城、博罗、惠州、河源、龙川等地,如果走水路顺江而下进入广州的话,舟船都要先南下往东绕过这个交汇点之后,再北上,往西才能进入广州府城。此外,珠江和东江汇合之后,水量增大,

珠江的江面因此变得辽阔起来,看起来像是大海一样,因为风大浪急,便得名狮子洋。南宋时,鉴于广州港对外贸易的持续繁荣以及地处交通要道,为了满足人们频繁的出行需求并保障来往交通的安全,时任广州佥判的河源人邬大昕考察了周边的地势地貌,决定开凿一条运河,东起东江边的增城县东洲驿,西抵南海神庙前的扶胥港,长约5公里,宽约150米。这样一来,从东江上游各地顺流而下的商人游人或者货物利用舟楫之便,可以更安全地抵达府城广州,而前来做生意的外国商船则可以因此多了一处安全的避风避浪之所。

沧海桑田, 随着时代变迁, 虽然广州外港几经变迁, 这条人 工开凿的小运河却一直延续到了现在。如今,鹿步滘早已丧 失了作为一条交通要道的作用,古代的水运没落之后,东江 上游的居民有着更便捷的方式来往广州,广州以东的交通被 广深公路和广九铁路所替代。扶胥港也早已变迁,周遭的十 地被城市开发之后,已经成为了不断膨胀的广州市区的一部 分。而周围的自然村落,**南湾,夏园,鹿步,东基**, 西基已经成为外来人口落脚广州的中转站,挤在逼仄的城中 村的砖房里,期待着实现自己的广州梦。而鹿步滘依然缓缓 从脚下流过,带来东江的水,又带走它。当初为了交通畅通 而开凿的人工河如今变成一条安静的河涌, 周围的乡村已是 另一番模样,可是作为一条自然的景观却保留了下来。在 1993年广州市政府决定规划开发西区的一部分为广州保税区 的时候,鹿步滘作为一条天然的分界线,划定了保税区的南 界。在保税区工作的员工,不管是从哪个方向来,都会经过 这条河,成为每日通勤之必经之处,自然这条河之于这里的 人有了更多的意义。

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The Old Canal in Free Trade Zone—Lu Bu Chung

Written by Urbanus

A river that stretches beside the factory of 3CEMS Group

Prime Technology is broad and quiet. It flows under the bonded bridge, bypasses the edge of Prime and Delton plant, a nd then flows through the dormitory area of 3CEMS Group. Tw o bridges of Kaifa Avenue and railways bend over the river. The n it slowly heads to Nanwan village and Nanhai God Temple. Fi nally, the river injects into the main stream of the Pearl River at the Huangpu power plant. It is the river that forms the natural b oundary between the Huangpu Free Trade Zone and the rest of the Western Development Zone of Guangzhou. Looking at the map, it has a name called Lu Kau Chung路滘涌. Kau滘 means wa ter channel in Cantonese. Lu(路Road) is the wrong pronunciatio n of Lu(鹿Deer). It comes from Lubu鹿步(Literal means Deer's St ep) village near the Free Trade Zone. At ancient times this river is better known as "Lu Bu Chung" or "Lu Bu Kau". From th e perspective of the river itself, it gives us the delusion that this river is a natural river. However, this river connects the main str eam of Dongjiang River from the East and the main stream of Pearl River from the West. This situation obviously has traces of artificial excavation. Even, the excavation time of this artifici al canal can be traced back to more than 900 years ago.



In ancient times, the Nanhai God Temple was located in a place known as "Fuxu". It was once the outer port and the first berthing place of Guangzhou, which was also the predecess or of Huangpu port. Since the Han Dynasty, Guangzhou has been the most important foreign trade port in southern China for more than 2000 years. Fuxu port, located on the edge of the Pearl River, is not only a transit station for goods entering and leaving inland, but also an important transportation route for pre-modern business and travel.

With the vicissitudes of time, although the outer port of Guangzhou has undergone several changes, this small canal has continued to the present day.

The Free Trade Zone and the Western Development Zone wher e 3CEMS Group Prime Technology located are situated at the in tersection of the main stream of the Pearl River and the Dongji ang River. Topographically, it is an inverted triangle, and the to p corner of the inverted triangle is the intersection of the Dongi iang River and the Pearl River. Before the construction of the L u Bu Chung canal, the residents in the upper reaches of Dongjia ng River came to the Capital city of Guangzhou from Zengchen g, Boluo, Huizhou, Heyuan, Longchuan and other places . If the y went down the river to Guangzhou, they had to go south and East, around this intersection point, then go north and west to enter Guangzhou. After the confluence of the Pearl River and t he Dongjiang River, the amount of water increases, so the river surface of the Pearl River becomes vast and looks like a sea. Be cause of the strong wind and strong waves, it is named Shiziya ng(Lion Sea). In the Southern Song Dynasty, in view of the conti nuous prosperity of foreign trade and the key location of Guan gzhou port in the main traffic road, in order to meet the freque nt travel needs of people and ensure the safety of traffic, Wu D axin, who was in official position of Guangzhou, inspected the s urrounding topography and decided to build a canal, starting fr om DongzhouYi courier station in Zengcheng County on the Ea st River and Fuxu port in front of Nanhai temple in the west, wh ich is about 5km long and about wide 150 meters. In this way, s hips going down the Dongjiang River can take advantage of th e canal, and the businessmen, tourists and goods from all over the upper reaches of the Dongjiang River can reach the capital city of Guangzhou more safely by boat, while foreign merchant

ships coming to do business can thus have a safe shelter from t he wind and waves.

with the vicissitudes of time, although the outer port of Guang zhou has undergone several changes, this small canal has continued to the present day. Nowadays, Lu Bu Chung has long lost its role as an important transportation channel. The east-west traffic has been replaced by Guangzhou-Shenzhen National Road. Fuxu port has been changed and vanished eventually. After the surrounding land accepted the urban development, Lu Bu Chung has become a part of the expanding Guangzhou city. The surrounding natural villages, such as Nanwan, Xiayuan,

Lubu, Dongji and Xiji, have become transit stations for immigrants to settle down in Guangzhou. They are crowded in the brick houses of narrow urban villages, expecting to realize their Guangzhou dreams. However, Lu Bu Chung still flows slowly under their feet, bringing water from Dongjiang River and taking it away. The canal, which was dug for safer traffic, has now become a quiet river. The surrounding countryside is quite different from old times, but as a natural landscape, it has been preserved. In 1993, when the Guangzhou municipal government decided to plan and develop a part of the western zone as the Guangzhou Free Trade Zone, Lu Bu Chung, as a natural dividing line, delimited the southern boundary of the Free Trade Zone. Employees working in the Free Trade Zone, no matter where they come from, will pass through this river and see it every day. Tod ay, this river has different significance for people living here.

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刘声: 百年流水柴

撰文: 陈侗



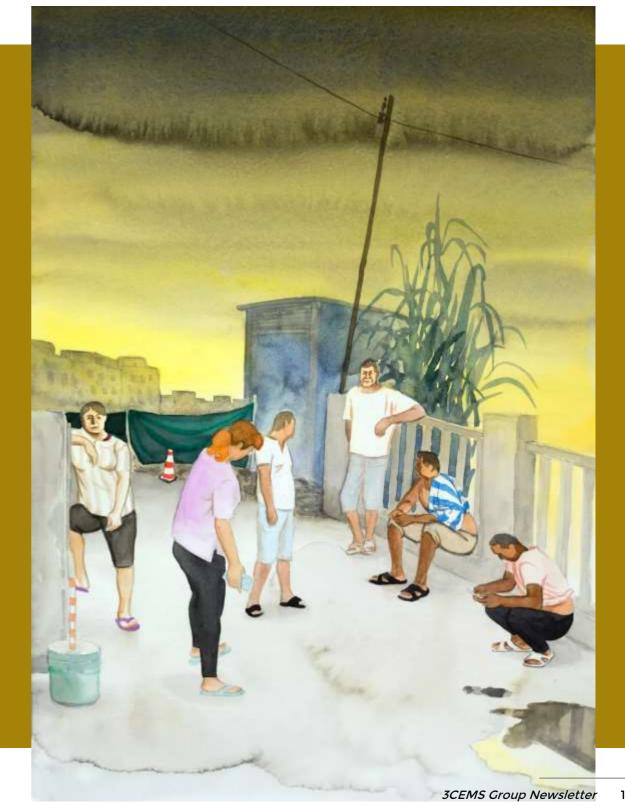
bona C R O

鸣谢: 本来画廊

文儿声的人物画不是情节性的连环画,但里面总是有故事。这些故事不是凭空杜撰的,每一个人物、每一个事件都有事实依据。这些事实来源于他对他居住的**番禺西三村**的实地调查,属于口述实录,而刘声作为调查者的角度,有时是旁观者的,有时是社会学家式的,但我们不要忘了,驱使他这么做的唯一理由只是因为他是艺术家。

所以,在我们感觉到刘声对人物命运极为关注的同时,也能发现用来表现殊途同归主题的手法丰富多样,其中不乏大胆的想像和形式的借用。这些系列画作是刘声前期作品的一次拓展与延伸,故事的主人公更加处于无助的境地,却又不无乐观的生活态度。在刘声看来,似乎生活在西三村的就只有这一类人物,无论他们走在外面多么地不显露神色,他们的身体里都塞满了各个时代的零部件,有些还能工作,有些仅仅成了个人历史的填充物。更有一些,就像刘声工作室正对着的那幢烂尾楼,如同纪念碑一般铭刻着那无休止的沮丧和乏力。

坦率地说,西三村在中国或者**珠三角地区**并非独一无二,只需改换一下人物和地点的名称,它的百年历史就能套用到任何一个村落。也正是在这一点上,刘声笔下的系列故事便显出了很强的普适性。在中国的历史大背景下,每一个人甚至无法单凭性格就让自己处于绝对的自我和真空状态,而他们的每一个举动在无意识的情况下也都能成为时代的符号。透过这些符号,艺术家捕捉到时间的色彩和空间的笔触,在形象和声音里找到孤独。普适之外也还有着唯一的不可替代,那就是刘声没有将自己安置在他的人物和环境之外,他作为艺术家的优越性同样会被倒影于西三村似动非动的河涌的水面,随后被鱼虾冲散、咬碎。村民说,那只是来自于另一个世界的孤独形象。





Consequently, when we notice the extreme attention Liu Sheng pays to characters' f ate, we also discover that the ways he has utilized for all those diverse but essentiall v homogeneous themes are abundantly various, full of bold imaginative leaps and th e appropriation of forms. These serials are an extension of Liu's previous works in tha t the protagonists are situated in an increasingly desperate condition yet still possess a positive attitude toward life. It appears to Liu Sheng that there is this kind of chara cter solely in Xisan village: no matter how expressionless they walked on the streets, their bodies are filled with components from all times, some still functional, some on ly become fillers of individual history. Some others are like the unfinished buildings o pposite to Liu Sheng's studio, everlastingly frustrated and fatigued as if they were m onuments.

Lid Sheng: One Hundred Years of Solitude in Floating Firewood

Portraits by Liu Sheng are not graphic novels with plots, yet they are always embe dded with stories. These stories are not fabricated. Rather, each character and event is ba sed on facts. These facts are from Liu's field research of his current home - Xisan village in the Panyu district of Guangzhou. His research is orally recorded. Liu as the researcher som etimes examines as a spectator, sometimes as a sociologist, but let's not forget that his on ly driving force comes from the identification as an artist.



Honestly, Xisan village is not unique in China or the Pearl River Delta area. If we change th e names of these people and locations, its centennial history would fit any other village. T his is exactly why Liu Sheng's serial stories present terrific universality. Under the grand his torical background of China, individuals can hardly position themselves in a vacuous absol uteness of the self while in the meantime each movement they unconsciously make can b e a mark of the time. Through these symbols, artists capture colors and brush strokes of ti me and locate loneliness in images and sounds. Besides universality, the uniqueness lies in Liu Sheng's not distinguishing himself from his characters and environment. His superiorit y as an artist will still be reflected in the seemingly movable surging river of Xisan village, t hen dispelled and consumed by the fish and shrimp. Villagers would say that's a solitary i mage from another world.



Acknowledgement: Bonacon Gallery



新闻集锦 Industrial News

编辑&整理: Urbanus

中国载人航天工程准备全面动工

第六届中国(国际)商业航天高峰论坛在武汉召开。中国载人航天工程办公室主任郝淳在会上表示,当前中国载人航天工程已经全面转入空间站建造的任务准备阶段,空间站的建成将为商业航天提供更为广阔的发展空间。商业化运作也可以为空间站运营提供有益的补充,中国载人航天工程将紧紧围绕加强协同创新、资源共享、投资融资、成果推广等环节寻找切入点、为推动形成载人航天商业化融合发展格局积累经验、奠定基础。

China's Manned Space Project Is Ready For Full Construction

The 6th China (International) Commercial Aerospace Forum (CCAF) opened in Wuhan on October 19. Hubei's vice governor Cao Guangjing gave a speech at the opening ceremony, noting that the commercial aerospace industry has been listed into in the province's "ten major high-quality development key industries" and the three-year action plan for new infrastructure construction.



Read more: https://bit.ly/2HjlOWK

据知名 去年同 是因为



Read more: https://bit.ly/3dKJSOf

三季度全球PC出货量创十年增速纪录

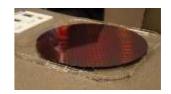
据知名科技咨询公司Canalys数据显示,今年第三季度全球PC厂商一共出货7900万台,比去年同期增长13%,其中联想为出货量最大的OEM厂商。PC出现如此大的增长,很大程度是因为疫情导致的在线课堂或远程办公的需要。虽说如此,供应链却难以跟上需求增长的步伐,据Canalys分析师Ishan Dutt称,供应链在这个月才开始逐渐恢复。

After An Early Pandemic Shortage Computers Are Shipping Again

Computer manufacturers shipped 79 million personal computers in the third quarter of 2020, an uptick of 13 percent year-over-year with Lenovo leading the pack, technology analyst firm Canalys reported. Earlier this year, laptops were especially hard to find, with a huge, sudden increase in demand from people working and learning from home during the coronavirus pandemic. But the supply chain wasn't able to keep up. But Canalys analyst Ishan Dutt said in a statement that vendors have started to recover in the months since.

中国首枚6寸晶圆制程在上海发布

韩国业内有关人士表示,美方上个月17日宣布新政策后,"(韩企)从当天起就已停止生产向华为供应的半导体。"但由于半导体生产工序的特性,允许在9月14日前向华为销售已投入工序制造的产品,从9月15日起,只有经过美国批准方可向华为销售。



First China-Made 6-Inch Silicon Carbide Wafer Released In Shanghai

The first China-made 6-inch silicon carbide MOSFET (metal oxide field effect transistor) wafer was released in Shanghai on October 16. The 6-inch silicon carbide MOSFET wafer is based on silicon carbide (third-generation semiconductor material) and is used in new energy industries such as new energy vehicles and photovoltaic power generation.

Read more: https://bit.ly/2I8cmWT

加速电气化,沃尔沃将电动机设计引入公司内部

沃尔沃已在上海开设了一个新的电动机实验室,这是该公司实现五年内半数汽车销量来自电动汽车目标的一大步。沃尔沃表示,目前建立的实验室是瑞典和中国不断发展的电动机和电池开发网络的一部分。目前,该公司正在哥德堡从事电力驱动工作,并在瑞典和中国设有电池开发实验室。



Volvo to Develop Electric Motors In-House

Engineers at Volvo Cars here are developing electric motors for use in the company's next-generation vehicles. The automaker has also opened a new electric motor lab in Shanghai. E-motors enable hallmark features that electric cars are known for, such as instant acceleration and one-pedal driving (using the gas pedal both for acceleration and deceleration, depending on whether drivers push in or lift their foot off the pedal).





Read more: https://bit.ly/36DTWHd

小鹏汽车第三季度营收超预期

11月12日,小鵬汽车发布2020财年第三季度未经审计的财务数据。受益于P7交付量提高,公司本季营收超预期,毛利首度转正。财务数据方面,小鵬汽车三季度总收入为人民币19.90亿元(2.93亿美元),较2019年同期的人民币4.50亿元增长342.5%,较2020年第二季度的人民币5.91亿元增长236.9%。

Xpeng Q3 Revenue Beats Expectations, Gross Margin Turns Positive For First Time

Chinese EV maker XPeng posted revenue of RMB 1.99 billion in the third quarter, higher than market expectations of RMB 1.9 billion, the company said today in financial results for the third quarter ended September 30, and expects fourth-quarter revenue of about RMB 2.2 billion.

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