





GRAPHICS CARD BUYING GUIDE FOR 2019

2019's already seen the release of Nvidia's bang for the buck RTX 2060, AMD's state of the art 7nm Radeon R7 and the fastest consumer card the RTX 2080 Ti. And with the future of Ray-tracing looking bright and the options for budget cards increasing ever so slightly, it is perhaps time for us to revaluate what makes for a great graphics card, suited for your gaming and professional needs.

THE BUDGET OPTIONS

Gigabyte G1 Gaming 1050Ti 4GB GDDR5 Price: Tk. 21,000/-

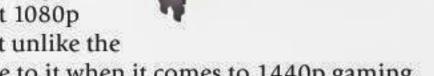
One of the most sought after budget cards available right now, the 1050 Ti offers a good price to performance ratio when it comes to gaming. While it regularly dips below 60 fps for modern titles and games, such as, The Witcher 3, which gets only 39 fps. No game however, AAA or not, dips to unsatisfactory levels on this card. This card is for those who are looking to game on a budget. But don't expect 60 fps on ultra settings.



XFX RX 580 GTS XXX Edition 8GB GDDR5

Price: Tk. 27,000/-

The predecessor to the Fatboy, the RX 580 is just as much a power hungry beast, which performs consistently well even with modern titles. It too scores consistently when it comes to offering up smooth graphical fidelity in games. It can easily handle games at 1080p whilst offering up 60 fps but unlike the Fatboy, there is more throttle to it when it comes to 1440p gaming.



XFX RX 590 Fatboy 8GB GDDR5

Price: Tk. 27,200/-Fatboy lives up to its name, as it comes packed with lots of

ports and a lot of heat. While this card can get very hot, it is also very consistent when it comes to offering up 1080p gaming. It offers up more than 60 fps on games like Shadow of the Tomb Raider, GTA V and Middle Earth: Shadow of War. But be warned for as powerful as this budget card maybe, it is also very power hungry.



THE MID-TIER CARDS

Sapphire Nitro Radeon R9 390 8GB GDDR5

Price: Tk. 32,500/-The R9 390 is an affordable upper-mid-tier card and boy does it punch above its weight and then some. The card comes with extra cooling, having three fans making the card really loud but also cooler than a lot of other cards. In some games like Battlefield 4

and GTA V, you can get frame rates in the region of 100. The Sapphire variant of the R9 390 is the most affordable of the 390 graphics card.



ZOTAC GAMING GEFORCE RTX 2060 6GB GDDR6 Price: Tk. 37,500/-

Zotac's RTX 2060 is the most affordable RTX card in the world right now. The card is considered as the successor of the GTX 1070 and it provides solid 1080p and 1440p gaming. Consider the card future proof too as the RTX 2060 comes with Nvidia's next-gen ray tracing technology and Turing architecture. However, RTX isn't widely supported yet but you are getting a very powerful card at a very decent price.

THE BEST OF THE BEST

GALAX GeForce® GTX 1080 EXOC-SNPR 8GB GDDR5

Price: Tk. 67,000/-The GTX 1080 is one of the best graphics cards in the world, becoming one of the first cards to make 4K gaming viable. The GTX 1080 offers

great performance overall and you can game at higher refresh rates very smoothly with this powerhouse. But the cost of being such a beast comes at the cost of some heat, more heat than its predecessors the GTX

Gigabyte GeForce® RTX 2080 WINDFORCE OC 8GB GDDR6

980s.

Price: Tk. 74,000/-Straight up, the RTX 2080 is an engineering marvel and a result of the decades of hard work that Nvidia has put into their craft. We recommend the Gigabyte RTX 2080 as it is the cheapest RTX 2080 card available.



The card is cool to the touch and has higher GPU boosting capabilities compared to the GTX 2080. And the RTX 2080 is the most dependable option if you want 4K gaming.

ASIF AYON

Gearing up for MWC 2019



Mobile World Congress is the premier smartphone and mobile technology showcase event of the year and it's set to start today. Expect no shortage of exciting reveals, groundbreaking tech and some new phones to fold the conservative smartphone design into pieces.

A couple of new smartphones have already made their mark on the event. Oppo's already made some noise at the event with their new phone. Oppo's new phone has an out of the world zoom feature, with 10x optical zoom on the main camera.

From one Chinese company to another, Xiaomi too has released the Mi 9 and other major phone manufacturers are expected to show off their latest and greatest products.

But if you've been following on since CES 2019, then you know that smartphone design and tech has been heading in very distinct direc-

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tions for a while, that being, the foldable design and the implementation of 5G in smartphones.

One phone that we can all expect to see is Huawei's foldable 5G enabled phone. It's also been rumoured that LG will showcase their own foldable design at the event.

And speaking of 5G, CES 2019 gave us a little glimpse into what the technology can offer with Qualcomm and D-Link showing off new tech during the event. The event will not only be a

showcase of 5G and foldable phones. HMD Global have already said that they will unveil the new Nokia smartphone at the event, so perhaps it's going to be the Pureview 9 device?

Alongside Nokia, expect unveilings from Vivo, Honor and Sony. Each company are set to take the stage during the course of the

event.

Apart from smartphone unveilings Microsoft and HTC are set to make big splashes at the event. It's been rumoured that Microsoft will be unveiling the Holo Lens 2 while HTC will be showing off the new Vive Focus Plus, their standalone VR headset.

The 3 day event is set to begin today at 2.30pm local time and will end on the 28th of February. With the release of the Samsung S10 and all its 5G glory, more manufacturers will try to trump one another at the event.

And with so many devices already making headlines, even before the start of the event, it's a refreshing change of pace after two years of notched glass sandwiches. Keep an eye out for the next issue of Bytes for the full coverage and our picks for the best tech reveals all from MWC 2019.

Is 6G a pipe dream or a distant reality?

Now that Samsung is out of the gates actually have a meaning yet, nor is with their 5G enabled Samsung S10, MWC is sure to be the grand stage for 5G. After months of teasing, this will be 5G's first main mark on the world stage. But before 5G could even make its mark, 6G has already entered the conversation, a conversation sparked by the President of the United States of America, Donald Trump.

Say what you will about the man, his urgency and agenda is pretty clear. Donald Trump's America is going to enter into trade talks next week with China and US policymakers fear that they will have to play catch up with China in the future in regards to the growth and implementation of 5G technology. But setting aside Trump's agendas and concerns, for now, let's try to assess what 6G actually means.

Unfortunately for us, 6G doesn't

there any framework to rely on currently. So, what is 5G? It's the fifth generation of mobile wireless technology and its coverage is growing the fastest in China, and with companies like Huawei and ZTE at the helm of 5G's growth, it's no wonder that 5G is China is growing so fast. However, this new technology requires five times the amount of network infrastructure compared to 4G. So, 6G will be the sixth generation of mobile wireless technology and will require more infrastructure than companies have planned for yet. But some companies have already started the conversation, namely, what Qualcomm and Huawei have had to say about the technology of the unforeseeable future.

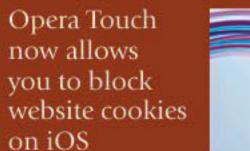
Out of all major players, it would seem as if Qualcomm would be the

true burden bearers of the American President's tweet. But Qualcomm has already come on record stating that the company has already started thinking about 6G. Huawei too has made claims that they will be focusing on 6G heavily once they roll out their 5G enabled smartphones.

But that's still many years away and as companies and Telco brands only start implementing infrastructural changes in order to accommodate for 5G, researchers in Finland are on route to begin testing on 6G with the tagline "Vision 2030" backing up their ambitious project.

But as ambitious as the tagline may be, given the current trajectory of 5G and China's dominance in its implementation, 6G may well see the light of day courtesy of Chinese technology, something that Donald Trump is aware of.











Google's 'Digital Wellbeing' features set to roll out on the Samsung Galaxy S10, Nokia 6 and Nokia 8



