

1 Subject

Affected Products	conga-TC175
Subject	conga-TC175 Benchmark & Power Consumption Comparison
Confidential/Public	Confidential
Date (yyyy.mm.dd)	2019.02.25
Author	SSE

2 Affected Article Numbers

2.1 Product Data

Affected Number(s)	Product
045250	conga-TC175/i7-7600U
045251	conga-TC175/i5-7300U
045252	conga-TC175/i3-7100U
045253	conga-TC175/3965U

3 Information

The following benchmark results help to compare the product variants of the above Intel® Kaby Lake-U (7th Gen Core™ processor) based COMs. All benchmarks were performed on conga-TC175 hardware revision C.1 and R116 BIOS, with Windows 10 64bit.

The following DDR4 memory configuration was used for the benchmarks:

- 2x 4GB DDR4 2400

See the table below for detailed information about the Intel® processors used for these benchmarks.

SKU	#Cores/ Threads	Frequency Base / Turbo	Cache	TDP	Processor Graphic
TC175/i7-7600U	2 / 4	2.8 GHz / 3.9 GHz	4 MB	15W	Intel® HD Graphics 620
TC175/i5-7300U	2 / 4	2.6 GHz / 3.5 GHz	3 MB	15W	Intel® HD Graphics 620
TC175/i3-7100U	2 / 4	2.4 GHz	3 MB	15W	Intel® HD Graphics 620
TC175/3965U	2 / 2	2.2 GHz	2 MB	15W	Intel® HD Graphics 610

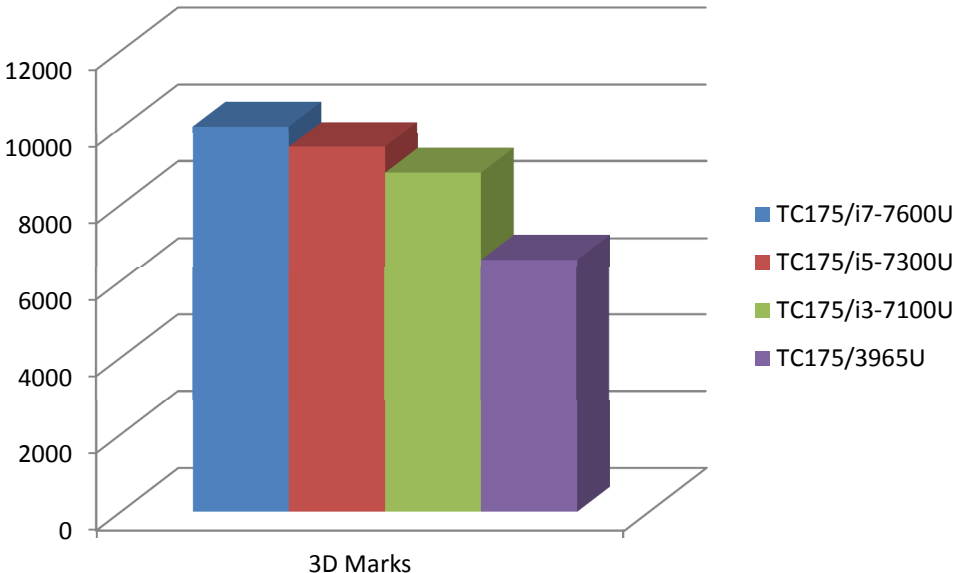


Note

Turbo mode was enabled on variants that support it.

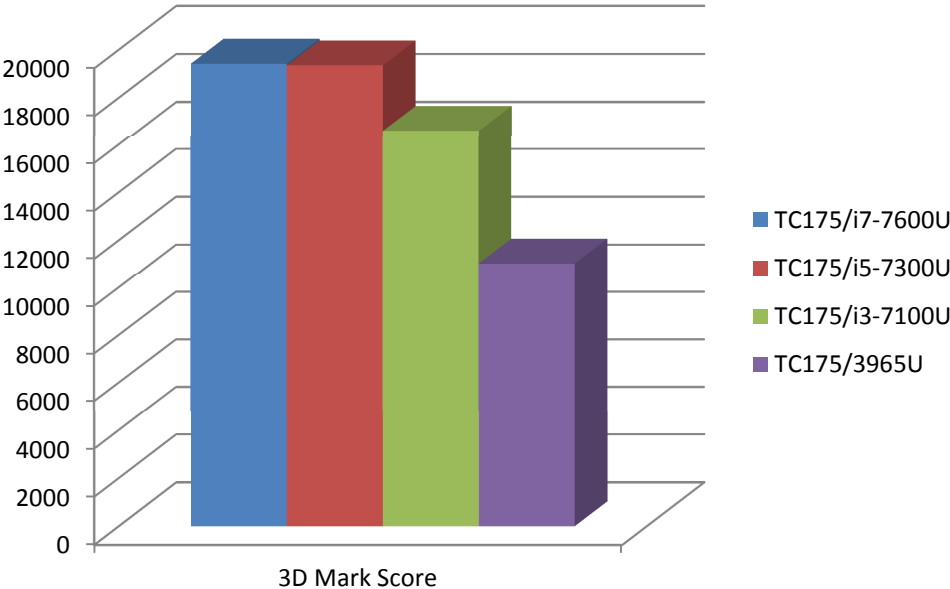
3.1 3D Mark06

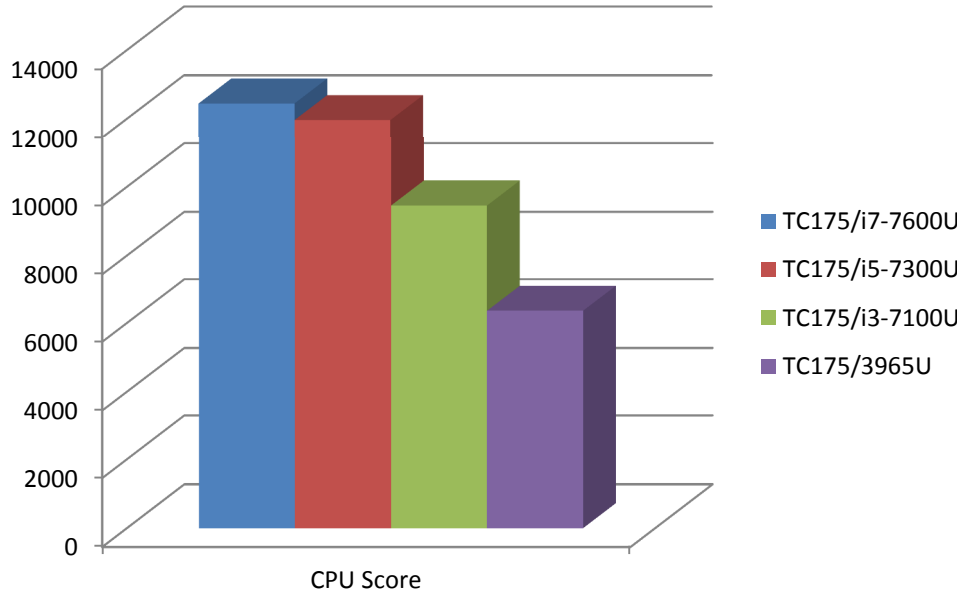
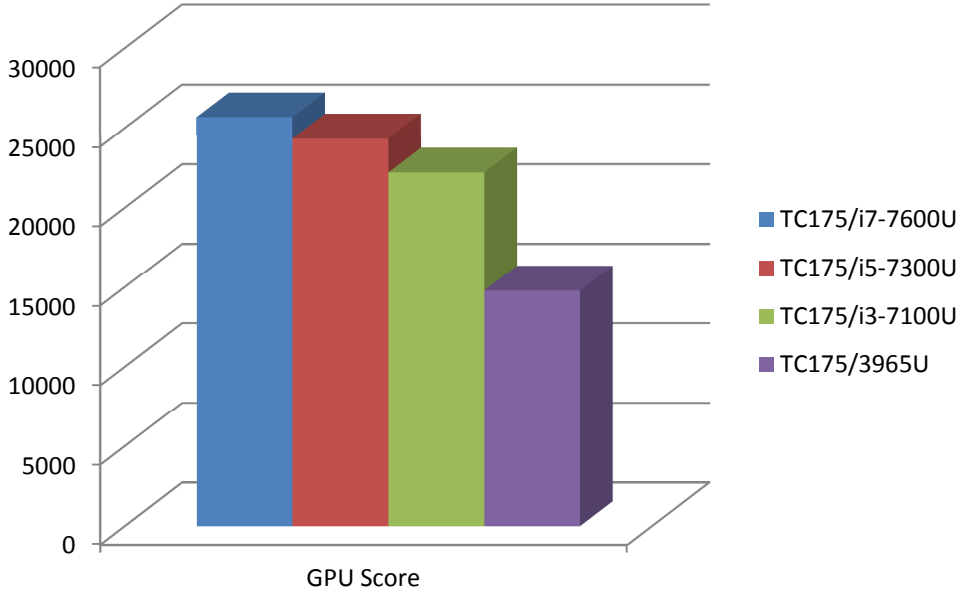
	TC175/i7-7600U	TC175/i5-7300U	TC175/i3-7100U	TC175/3965U
	045250	045251	045252	045253
3D Marks	10037	9505	8827	6574
SM2.0 Score	3512	3331	3181	2421
HDR/SM3.0 Score	4371	4215	3938	2851
CPU Score	4487	4385	3375	2592



3.2 3D Mark Vantage (Entry)

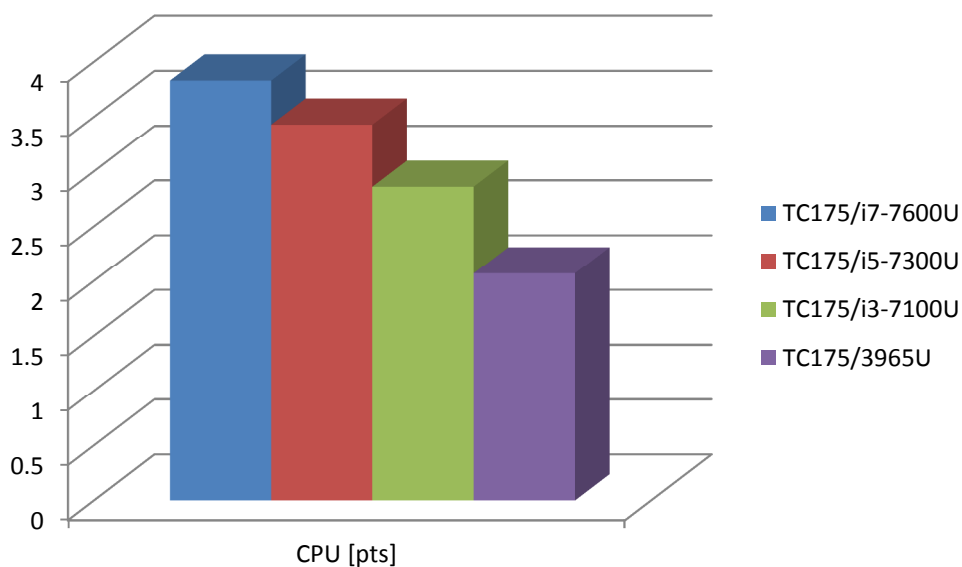
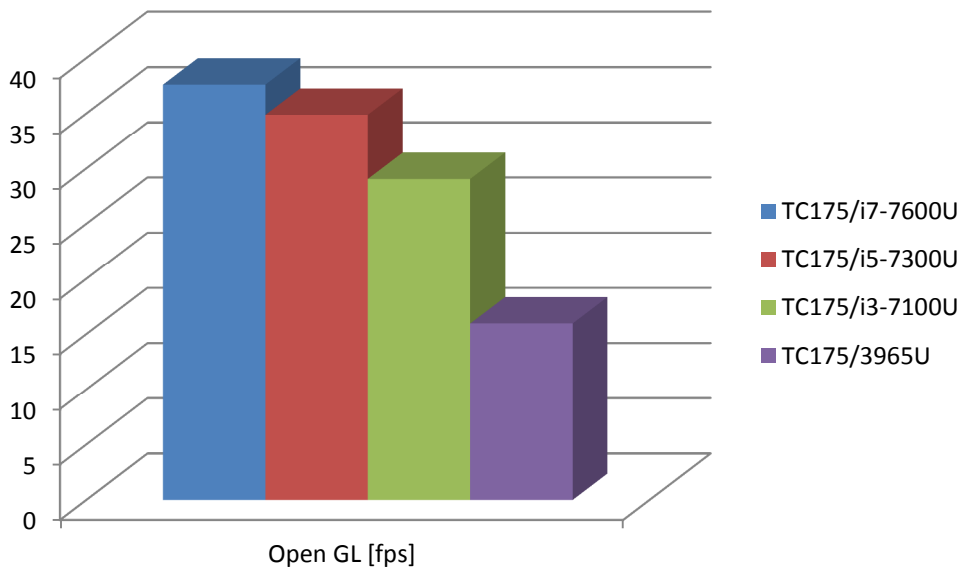
	TC175/i7-7600U	TC175/i5-7300U	TC175/i3-7100U	TC175/3965U
	045250	045251	045252	045253
3D Mark Score	19417	19345	16610	11030
GPU Score	25688	24345	22211	14781
CPU Score	12453	11970	9456	6357





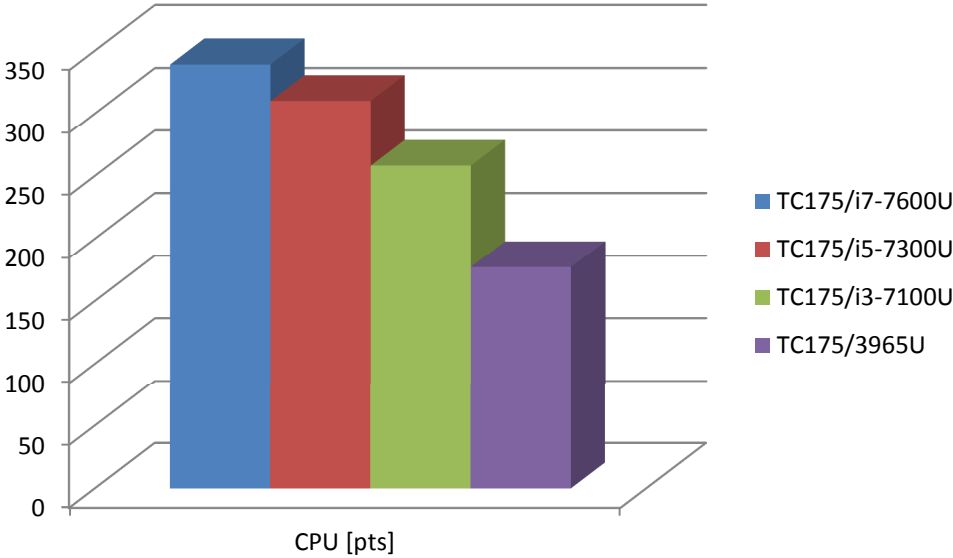
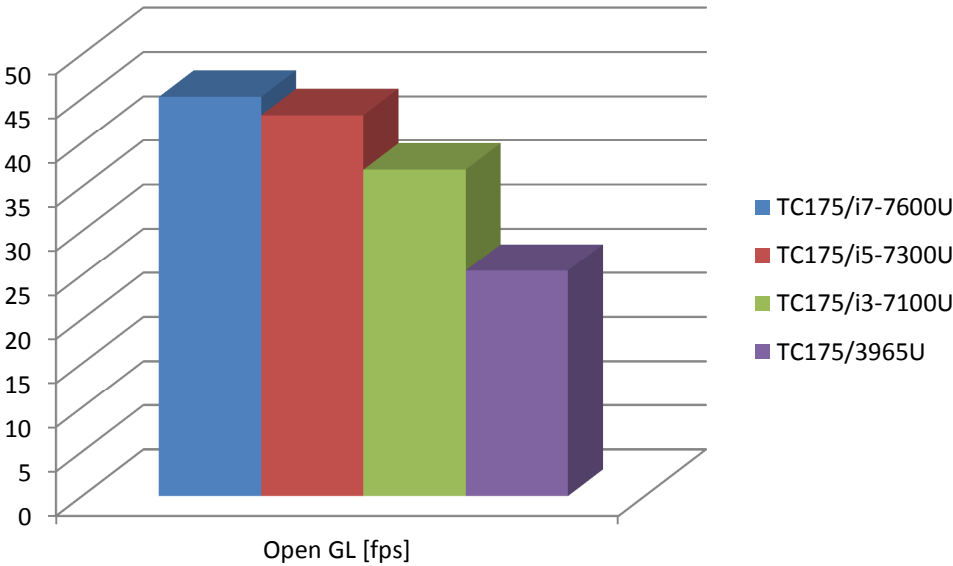
3.3 Cinebench Release 11.5

	TC175/i7-7600U	TC175/i5-7300U	TC175/i3-7100U	TC175/3965U
	045250	045251	045252	045253
Open GL [fps]	37.62	34.89	29.05	15.96
CPU [pts]	3.83	3.43	2.86	2.07



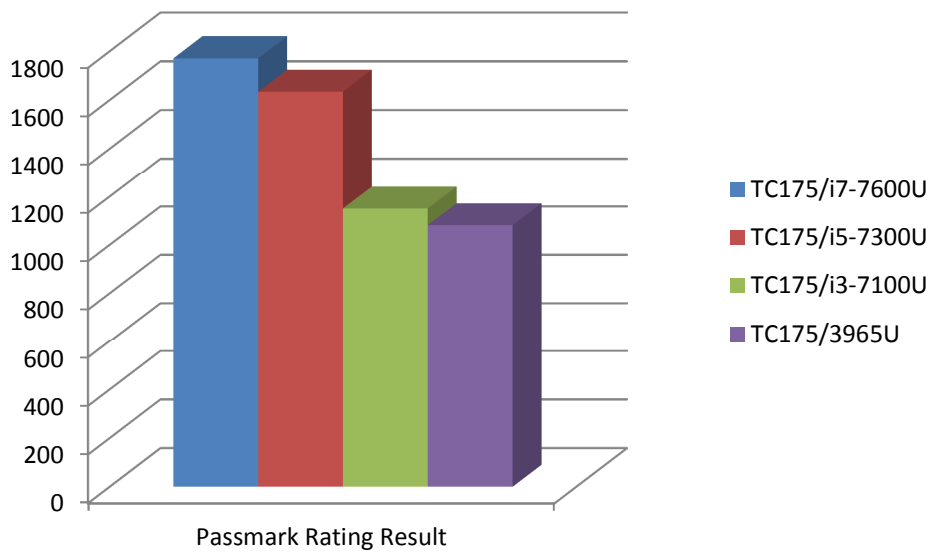
3.4 Cinebench Release 15

	TC175/i7-7600U	TC175/i5-7300U	TC175/i3-7100U	TC175/3965U
	045250	045251	045252	045253
Open GL [fps]	45.2	43.12	36.91	25.49
CPU [pts]	339	310	258	177



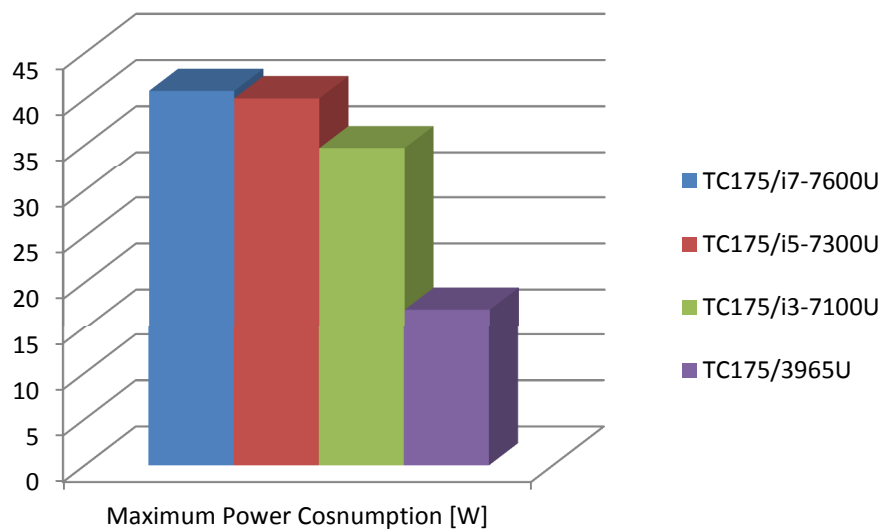
3.5 Passmark Performance Test 7.0

	TC175/i7-7600U	TC175/i5-7300U	TC175/i3-7100U	TC175/3965U
	045250	045251	045252	045253
Passmark Rating Result	1770.9	1634.2	1150.6	1081.3
CPU-Mark	2696.6	2390.7	1560.6	1503.7
2D-Grafics-Mark	428.6	419.1	304.3	277.3
3D-Grafics-Mark	823.4	805.5	718.2	591.8
Memory-Mark	2677.3	2291.5	1526.2	1502.4
Disk-Mark	3464.2	3445.9	3420.6	3468.7



3.6 Power Consumption

	TC175/i7-7600U 045250	TC175/i5-7300U 045251	TC175/i3-7100U 045252	TC175/3965U 045253
Desktop Idle [W]	3.96	3.78	3.85	3.50
100% CPU [W]	22.62	21.20	16.43	11.05
100% GPU [W]	28.13	27.99	20.50	9.60
100% CPU & 100% GPU [W]	28.61	25.08	27.82	16.41
Maximum Power Consumption [W]	40.87	40.07	34.67	17.02
Suspend to RAM [W]	0.33	0.32	0.34	0.31



4 Revision History

Revision	Date (yyyy-mm-dd)	Author	Changes
1.0	2019.02.26	SSE	initial release