

Process Algebra/CCS/EST - To Probe Smart Devices & IoT- Communications A Simple Suggestion on Using EST in Smart Devices/IoT- informatics Domains.

Nirmal Tej Kumar
Independent Consultant : Informatics/Photonics/Nanotechnology
email id : hmf2014@gmail.com

[I] Introduction & Inspiration :

“Algebraic Methods to Model Secure IoT - Internet of Things (IoT) Impact on Big Data and Data Science.”

<https://3bplus.nl/how-do-smart-devices-work-sensors-iot-big-data-and-ai/>

<https://www.semanticscholar.org/topic/E-theorem-prover/2174248>

http://vixra.org/author/n_t_kumar

<https://www.semanticscholar.org/author/Nirmal-Tej-Kumar/12354503/suggest>

[https://pdfs.semanticscholar.org/19d9/cd6357c54083c99454c99b9f457e41a1dc49.pdf?
_ga=2.123215683.951495859.1549688495-1550725623.1549688495](https://pdfs.semanticscholar.org/19d9/cd6357c54083c99454c99b9f457e41a1dc49.pdf?_ga=2.123215683.951495859.1549688495-1550725623.1549688495)

[II] EST based Informatics Framework :

Step A : Process Algebra --via → EST –to probe → Smart Devices /IoT Framework.

<https://xdk.bosch-connectivity.com/home>

https://www.bosch-sensortec.com/bst/products/all_products/bme280#

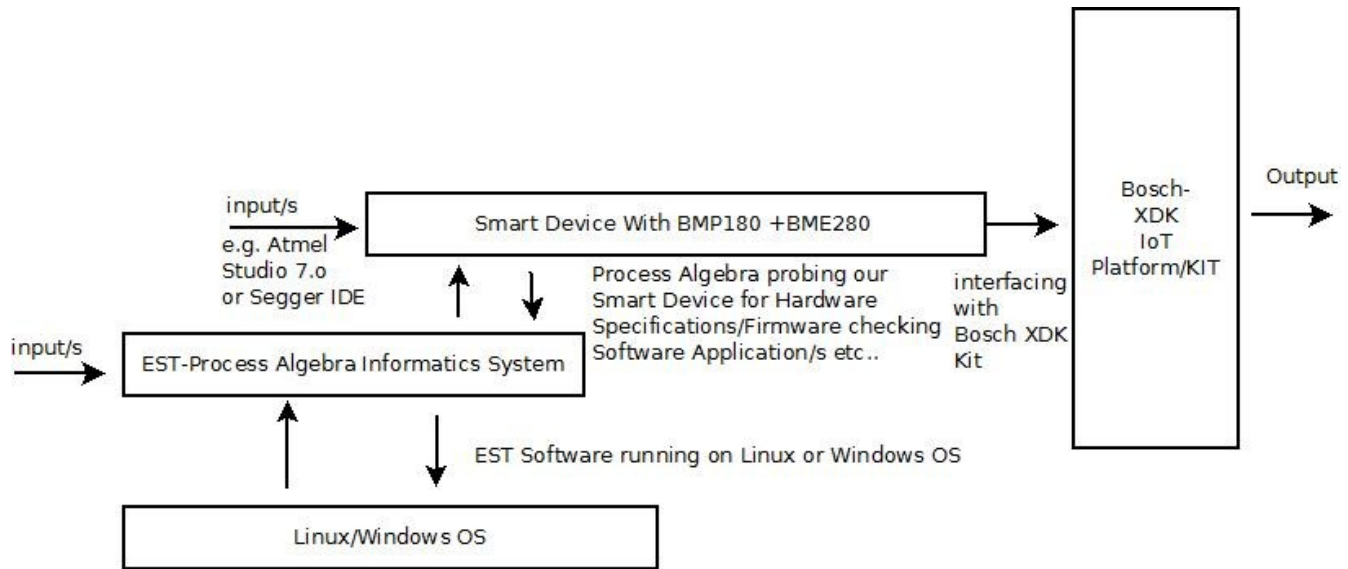
<https://github.com/finitespace/BME280>

https://www.bosch-sensortec.com/bst/products/all_products/bmp180

****Note : We have used Bosch products in some of our Embedded Systems Projects hence suggesting them here. There could be other options as well.****

****Please Note : Readers are requested to satisfy themselves before using the information presented here.****

**** Author/s are not endorsing any commercial products here ****



Approximate Smart Device & IoT Testing Framework With Process Algebra
A Simple Suggestion Only.

Step B : Block Diagram Approach

[III] Information on Mathematics & Software Used :

<https://pdfs.semanticscholar.org/c78c/6b6f7844c6e57f431810496e2573c7fe7a66.pdf>

<http://lms.uni-mb.si/~meolic/research.html>

<https://github.com/meolic/biddy>

<http://est.meolic.com/home/>

<http://biddy.meolic.com/>

[https://tutcris.tut.fi/portal/en/publications/equivalence-classes-of-boolean-functions\(060dda37-1033-46ff-8b50-e28e88b9f634\)/export.html](https://tutcris.tut.fi/portal/en/publications/equivalence-classes-of-boolean-functions(060dda37-1033-46ff-8b50-e28e88b9f634)/export.html)

<https://tutcris.tut.fi/portal/files/2312848/stankovic.pdf>

<http://processalgebra.blogspot.com/>

<https://en.wikipedia.org/wiki/T-Kernel>

http://www.t-engine.org/wp-content/themes/wp.vicuna/pdf/specifications/TEF020-S001-02.01.00_en.pdf

http://www.t-engine4u.com/archive/tk2x86_tutorial_ecr_e.pdf

http://www.t-engine4u.com/archive/tk2x86_tutorial_ecr_e.pdf

http://www.t-engine.info/en/spec/t-kernel/1.00/tkernel_os/

[IV] Conclusion/s With Future Perspectives :

We have suggested a simple process algebra based framework to probe Smart Devices &IoT Computing Environments. One of the pioneering technical notes on Smart Devices/IoT Applications. Hope this will certainly inspire others in this dynamic domain.

[V] Acknowledgment :

Thanks to all my FRIENDS & Colleagues internationally. Non-Profit Academic R&D only.

[VI] References

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2. <https://www.cs.vu.nl/~wanf/BOOKS/procalg.pdf>
3. <https://www.sciencedirect.com/book/9780444828309/handbook-of-process-algebra>
4. <https://pdfs.semanticscholar.org/12d9/eae1638729aeb237b5be445ee91ecdd3c5d7.pdf>
5. http://se.wpa.wtb.tue.nl/_media/vanbeek/procalg-handb-dynsys.pdf
6. http://www2.compute.dtu.dk/~fnie/Papers/NiNi96tcs_cml.pdf
7. http://www2.cs.ucy.ac.cy/~mavronic/Lab/pdf/AP_ALP07.pdf
8. <https://ieeexplore.ieee.org/document/8292802>
9. <http://www.cs.ru.nl/~erikpoll/ftfjp/2002/PhillipsEisenbachLister.pdf>
10. Process Algebra for Parallel and Distributed Processing - edited by Michael Alexander, William Gardner.
11. Formal Methods for Mobile Computing: 5th International School on Formal ... edited by Marco Bernardo, Alessandro Bogliolo.
12. <https://arxiv.org/abs/1512.07304>
13. http://www2.imm.dtu.dk/GLOBAN/DeNicola_NEW_1.pdf
14. <https://dl.acm.org/citation.cfm?id=977108>
15. https://jglobal.jst.go.jp/en/detail?JGLOBAL_ID=201802242350912172&rel=0

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