



## Press Release

### IIT Hyderabad and WiSig announce ‘Koala’, India’s first 5G SoC to drive NB-IoT Applications

#### Highlights:

- ***Koala, India’s first 5G cellular chipset.***
- ***Koala NB IoT SoC fulfils the objective of ‘Atmanirbhar Bharat’ and has wide-ranging 5G applications.***
- ***Department of Telecommunication (DOT) has funded this activity as part of the “Indigenous 5G Testbed” project, and MEITY supported the SoC design through the FabCI incubator.***

**Hyderabad: July 01, 2021:** Indian Institute of Technology Hyderabad (IITH), along with WiSig, today announced ‘Koala’ an NB-IoT SoC (Narrowband Internet-of-Things System-on-Chip). NB-IoT is a 5G massive Machine-Type-Communication (MTC) technology that enables low-bit rate IoT applications with long-range and device battery life up to 10 years. ***Smart meters, machine-to-machine connectivity, Industry 4.0, a plethora of sensor connectivity, asset tracking, digital healthcare, and many more applications find the use of Koala.***

The SoC supports 3GPP Rel-13/14 compliant NB-IoT modem with integrated baseband and radio, an application processor, and GPS functionality for location tracking. Department of Telecommunication (DOT) has funded this “***Indigenous 5G Testbed***” project. IITH and WiSig networks (WiSig), a 5G start-up incubated in iTIC (IITH Technology Incubator) and FabCI (Fabless Chip Design Incubator, a MEITY funded incubator at IITH) collaborated in the successful development of ***Koala, India’s first 5G cellular chipset***. Cyient, an Indian Multinational Company, did the semiconductor design.

**Congratulating Prof. Kiran Kuchi for this noteworthy work, Prof. B.S. Murty, Director, IITH, said, “I am delighted that Koala SoC, an NB-IoT 3GPP standards-compliant chipset, has been jointly developed by IITH and WiSig. I applaud Prof. Kiran Kuchi for this initiative. I also thank DoT for the 5G Testbed project and MEITY for the FabCI incubator. Koala NB IoT fulfils the objective of ‘Atmanirbhar Bharat’ and has wide-ranging 5G applications. I am also Happy that Cyient has been a partner in this development, which is a demonstration of synergy between industry and academia, that is crucial for realizing Atmanirbhar Bharat.”**

**Researcher can be reached via our public relations cell at [pro@iith.ac.in](mailto:pro@iith.ac.in) for any further queries in the subject matter.**

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#### About IIT Hyderabad

Indian Institute of Technology Hyderabad (IITH) is one of the six new IITs established by the Government of India in 2008. In a short span of **12** years, the institute has become **top-10** among Engineering institutes in the **NIRF** and **QS** with **241** full-time faculty and **3,397** students (**20%** women). The institute has a strong research focus with more than Rs **435** crore of sanctioned research funding with PhD scholars accounting for about **30%** of total student strength. With the motto of Inventing and Innovating in Technology for Humanity (IITH), IITH has to its credit **5500+** research publications, **166** patent disclosures, **1440** sponsored/consultancy projects, **200** state-of-the-art laboratories, **5** research and entrepreneurship centres, and **50** industry and academic collaborations.



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