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ICASP3338-20: The High-Efficiency Power Amplifier for Advanced Wireless Communication Systems

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Taipei, Taiwan, March 2023 - iCana has announced the release of its high-efficiency 20 W Power Amplifier ICASP3338-20. Designed for 5G NR FR1 bands n48, n77, and n78 wireless infrastructure, this amplifier offers an extraordinary performance on efficiency, gain, and ruggedness.



"The ICASP3338-20 is our first GaN PA targeting small cells with 1 to 2 W output power." **Henrik Andersen, Chief Marketing Officer at iCana**, commented. "Through a novel Doherty architecture and thermal co-design, we have realized a PA with excellent wide bandwith performance."

The ICASP3338-20 is fully matched at input and output, allowing for easy system integration and manufacturability. The power amplifier average operating power is 35 dBm (3 W), where it offers a high gain of 28 dB and power-added efficiency (PAE) above 30%. When linearized by digital pre-distortion (DPD) it achieves excellent linearity with adjacent channel leakage ratio (ACLR) below -50 dBc and error vector magnitude (EVM) below 3% across the band. The amplifier can also withstand a voltage standing waver ratio (VSWR) mismatch of up to 10:1 in case of any abnormal circumstance.

ICASP3338-20 is an ideal component for small cell and ORAN RU designs with 1 to 2 W output power per antenna port. The compact package measures only $6 \times 10 \text{ mm}^2$, and is pin-to-pin compatible with all of iCana's 20 W PA family covering all major 5G frequency bands.

Henrik adds, "The fully-integrated 50 Ohm match at input and output in a small form factor allow our customers to quickly introduce this product into their current and next-generation designs with minimal effort."

The ICASP3338-20 is ready for sampling and can be ordered directly from iCana or via their distributors. For more information about ICASP3338-20 please contact iCana at: **sales@icana-rf.com**

About iCana

iCana is a fabless semiconductor component supplier for the Wireless Telecommunications Infrastructure market. As the world is evolving fast towards 5G with new architectures and technical challenges ahead, iCana has been transforming its IP portfolio into a range of key high-performing products in different semiconductor technologies, to support the 5G market and ecosystem.

For general enquiries, please email to:

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iCana Limited

