Design and Analysis of a Low-Power 45 nm CMOS LNA for 2.4 GHz BLE Receivers Using Inductive Degeneration and PCSNIM Technique
Cornelia Zefanya, Dzuhri Radityo Utomo, S.T., M.S., Ph.D.;Ir. Prapto Nugroho, S.T., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DESIGN AND ANALYSIS OF A LOW-POWER 45 NM CMOS LNA FOR 2.4 GHZ BLE RECEIVERS USING INDUCTIVE DEGENERATION AND PCSNIM TECHNIQUE

THESIS

THE SUSTAINABLE DEVELOPMENT GOALS
Industry, Innovation and Infrastructure
Affordable and Clean Energy

Written by:

Cornelia Zefanya
22/499785/TK/54764

BACHELOR OF ELECTRICAL ENGINEERING PROGRAM

DEPARTMENT OF ELECTRICAL AND INFORMATION ENGINEERING
FACULTY OF ENGINEERING UNIVERSITAS GADJAH MADA
YOGYAKARTA
2026

Design and Analysis of a Low-Power 45 nm CMOS LNA for 2.4 GHz BLE Receivers Using Inductive Degeneration and PCSNIM Technique
Cornelia Zefanya, Dzuhri Radityo Utomo, S.T., M.S., Ph.D.;Ir. Prapto Nugroho, S.T., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

SKRIPSI

DESIGN AND ANALYSIS OF A LOW-POWER 45 NM CMOS LNA FOR 2.4 GHZ BLE RECEIVERS USING INDUCTIVE DEGENERATION AND PCSNIM TECHNIQUE

Dipersiapkan dan disusun oleh

Cornelia Zefanya
22/499785/TK/54764

Telah dipertahankan di depan dewan penguji
pada tanggal : **14 Juli 2026**

Susunan Dewan Penguji

Pembimbing Utama	Pembimbing Pendamping
Dzuhri Radityo Utomo, S.T, M.E., Ph.D	**Ir. Prapto Nugroho, S.T., M.Eng., D.Eng., IPM.**

Anggota Dewan Penguji Lain

Muhammad Faris, S.T., M.Sc., Ph.D.	**Dr. Dyonisius Dony Arianandа, S.T., M.Sc.**

Skripsi ini telah diterima sebagai salah satu persyaratan
untuk memperoleh gelar Sarjana Teknik
Tanggal: 17 Juli 2026
Pengelola Program Studi: Sarjana Teknik Elektro

Dr. Iswandi, S.T., M.Eng.
NIP 197604152002121004

Mengetahui,
Ketua Departemen Teknik Elektro dan Teknologi Informasi

Prof. Ir. Hanung Adi Nugroho, S.T., M.Eng., Ph.D., IPM., SMIEEE.
NIP 197802242002121001