

# DQRUMA PROTOCOL FOR WIRELESS MULTIMEDIA SYSTEM

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MARA Institute of Technology

40450 Shah Alam

Selangor Darul Ehsan



MOHD. RADZI BIN JAMALUDIN (95011343)

Faculty of Electrical Engineering

MARA Institute of Technology

40450 Shah Alam

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## APPROVAL SHEET

This project report attached here to, entitle "DQRUMA PROTOCOL FOR WIRELESS MULTIMEDIA SYSTEM" prepared and submitted by Mohd. Radzi Bin Jamaludin in partial fulfillment of the requirements for the Bachelor of Electrical Engineering is hereby accept.

Dr. Mohd. Dani Bin Baba  
Project Supervisor  
Faculty of Electrical Engineering  
MARA Institute of Technology  
40450 Shah Alam

## ABSTRACT

This paper examines the Distributed-Queuing Request Update Multiple Access (DQRUMA) which is the proposed Medium Access Control (MAC) Protocol for wireless Asynchronous Transfer Mode (ATM) to cater the wireless Multimedia Communication System.

We also investigate the Multimedia System and its typical applications, also about the ATM Technology in order to support the multimedia applications. We also described the requirement of the MAC Protocol in order to support the shared communication channel by multiple users.

There are three stages how we can implement this project. The first stage is to analyze about the multimedia applications, followed by second stage, that is the operation of ATM and the last stage is the requirements of the MAC Protocol.

For this project, we will focus on the DQRUMA Protocol operation. These due DQRUMA Protocol modelling using the simulation package, NETWORK 11.5. The characteristic and the performance of the modelling network are analyzed using the simulation results. This include the discussion on the performance evaluating of DQRUMA Protocol model with respect to their average access delay, average throughput, percentage utilization and the average number of successful transfer.

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