SE19 - Next Gen Brush Motor Current Control

Description

- Regulator design for improved frequency response consistency, simplified tuning process
- Optimal anti-windup design for improved stability during voltage saturation

Feedforward compensation and state-feedback for improved disturbance rejection

EPS TORQUE

CONTROL

REFERENCE

CALCULATIONS

MOTOR CONTROL

- Motivation (Type:n)
 - <Provide rationale>
- Deliverables
 - Function design requirements
 - FDD (SF-99C)
- Timing
 - Next big brush program
- Team Members/Customers
 - Prerit Pramod, Chris Rogner, Rakesh Mitra, Krishna Namburi, Varsha Govindu, Srujan Maram



SATURATION &

BRUSH

MOTOR

SE19 – Next Gen Brush Motor Current Control

Status

- Prototype software requirements complete
- PSR software requested (FE resource)

Challenges

 It is difficult to keep the Brush EPS projects at high enough priority to get resources.

Next Steps

- Completion and delivery of PSR code (FE-7) Srujan Maram
- Functional testing of PSR code
- Functional verification of performance improvements
- Release of production version of FDD (SF-99C)
- Inclusion in Brush program build plans

