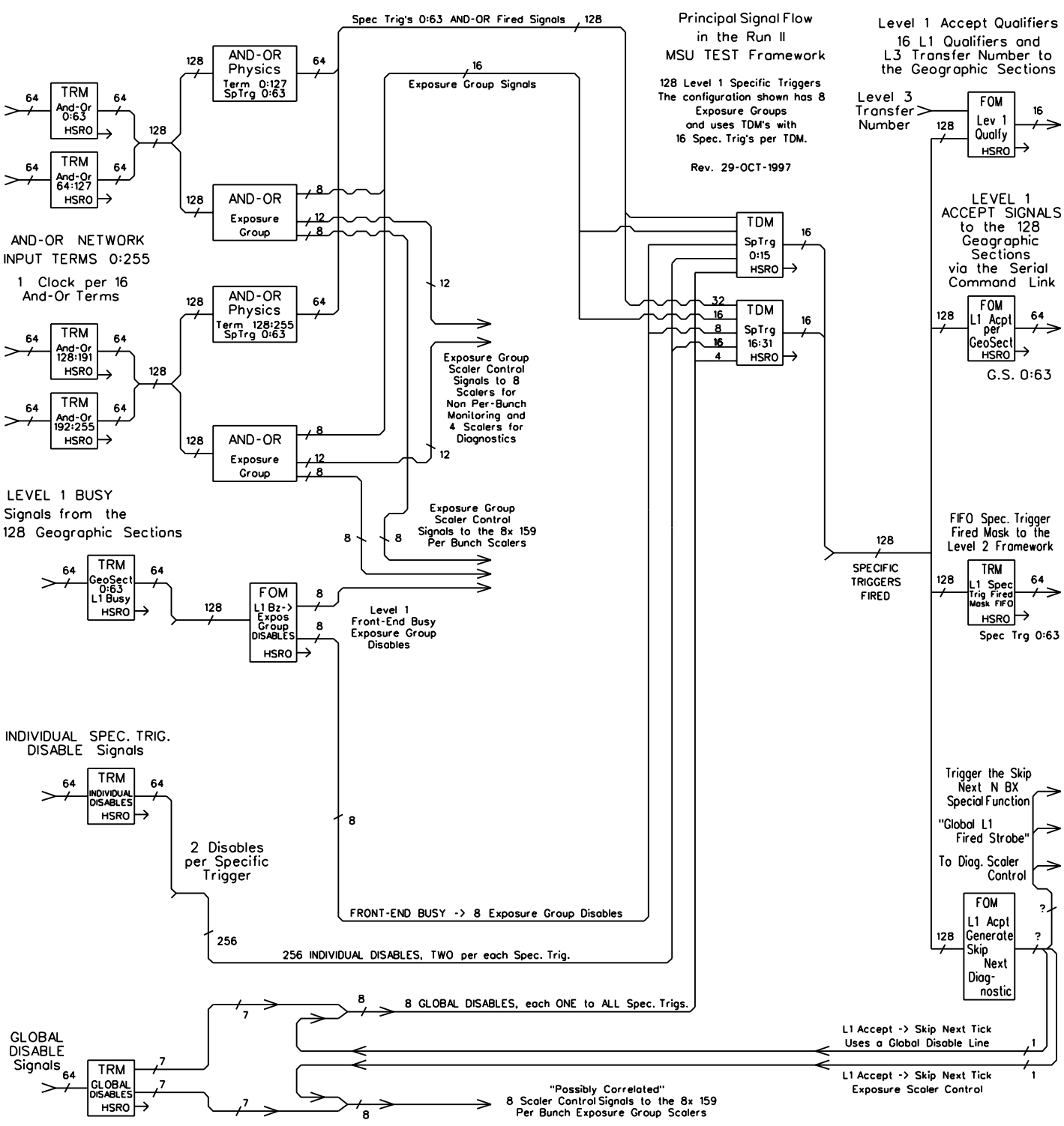
Principal Signal Flow in the Run II MSU TEST Framework
128 Level 1 Specific Triggers
The configuration shown has 8 Exposure Groups
and uses TDM's with 16 Spec. Trig's per TDM.
Rev. 29-OCT-1997
Spec Trig's 0:63 AND-OR Fired Signals
128
AND-OR Physics Term 0:127 SpTrg 0:63
AND-OR Exposure Group
16 Exposure Group Signals
TRM And-Or 0:63 HSRO
TRM And-Or 64:127 HSRO
AND-OR NETWORK INPUT TERMS 0:255
1 Clock per 16 And-Or Terms
AND-OR Physics Term 128:255 SpTrg 0:63
TRM And-Or 128:191 HSRO
TRM And-Or 192:255 HSRO
Exposure Group Scaler Control Signals to 8 Scalers for Non Per-Bunch Monitoring and 4 Scalers for Diagnostics
Exposure Group Scaler Control Signals to the 8x 159 Per Bunch Scalers
LEVEL 1 BUSY Signals from the 128 Geographic Sections
TRM GeoSect 0:63 L1 Busy HSRO
FOM L1 Bz-> Expos Group DISABLES HSRO
Level 1 Front-End Busy Exposure Group Disables
TDM SpTrg 0:15 HSRO
TDM SpTrg 16:31 HSRO
SPECIFIC TRIGGERS FIRED
Level 1 Accept Qualifiers
16 L1 Qualifiers and L3 Transfer Number to the Geographic Sections
Level 3 Transfer Number
FOM Lev 1 Qualfy HSRO
LEVEL 1 ACCEPT SIGNALS to the 128 Geographic Sections via the Serial Command Link
FOM L1 Acpt per GeoSect HSRO
G.S. 0:63
FIFO Spec. Trigger Fired Mask to the Level 2 Framework
TRM L1 Spec Trig Fired Mask FIFO HSRO
Spec Trg 0:63
INDIVIDUAL SPEC. TRIG. DISABLE Signals
TRM INDIVIDUAL DISABLES HSRO
2 Disables per Specific Trigger
FRONT-END BUSY -> 8 Exposure Group Disables
256 INDIVIDUAL DISABLES, TWO per each Spec. Trig.
Trigger the Skip Next N BX Special Function
"Global L1 Fired Strobe"
To Diag. Scaler Control
FOM L1 Acpt Generate Skip Next Diag-nostic
8 GLOBAL DISABLES, each ONE to ALL Spec. Trigs.
GLOBAL DISABLE Signals
TRM GLOBAL DISABLES HSRO
L1 Accept -> Skip Next Tick Uses a Global Disable Line
L1 Accept -> Skip Next Tick Exposure Scaler Control
"Possibly Correlated" 8 Scaler Control Signals to the 8x 159 Per Bunch Exposure Group Scalers