



## SDA and ALX

### MiniFlex Super Distribution Amplifiers 1002 MHz 42/53 MHz Frequency Split

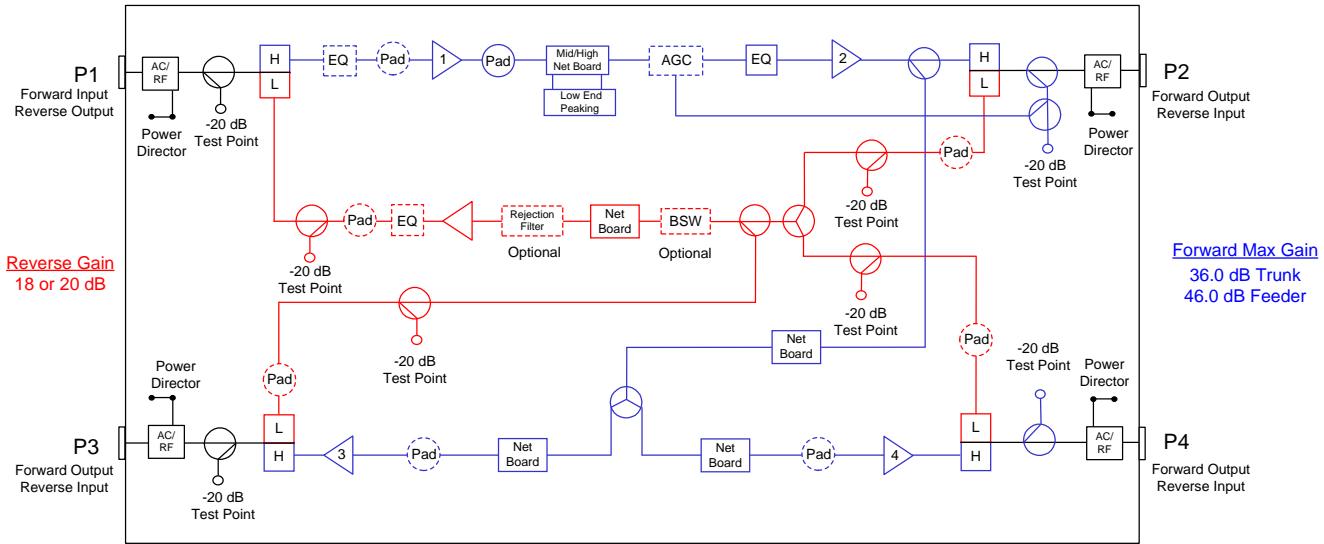
The ACI MiniFlex super distribution RF amplifiers are now offered with the Gallium Nitride (GaN) hybrid technology that allows for 3 dB higher output levels while maintaining close to the same specifications as the previous stations with the Gallium Arsenide (GaAs) hybrids. With this increase in the output level capabilities the cable operators are now able to extend the fiber deeper in their networks at a lower cost by reducing the number of active that are needed. The GaN hybrid technology is also extremely beneficial for use in the traditional HFC networks with the increase in station performance at the standard output levels over the GaAS hybrid stations.

#### Features

- ◆ 1002 MHz may be dropped into the 750 or 870 MHz spacing
- ◆ Availability of an 85/105 or 204/258 MHz option to increase the reverse bandwidth
- ◆ Common 1002 MHz housing platform
- ◆ Optional, 8 or 14 MHz reverse path rejection filter (sold separately)
- ◆ 5 to 42, 55, 65, 85 or 204 MHz reverse path
- ◆ Patented DSIM Technology (Digital AGC)
- ◆ Increased reliability with higher surge
- ◆ Ideal for fiber deep networks with the extended reach of the amplifiers
- ◆ Ideal for traditional HFC networks for increased performance & reliability
- ◆ Lower power consumption
- ◆ Upgradable, reverse split options

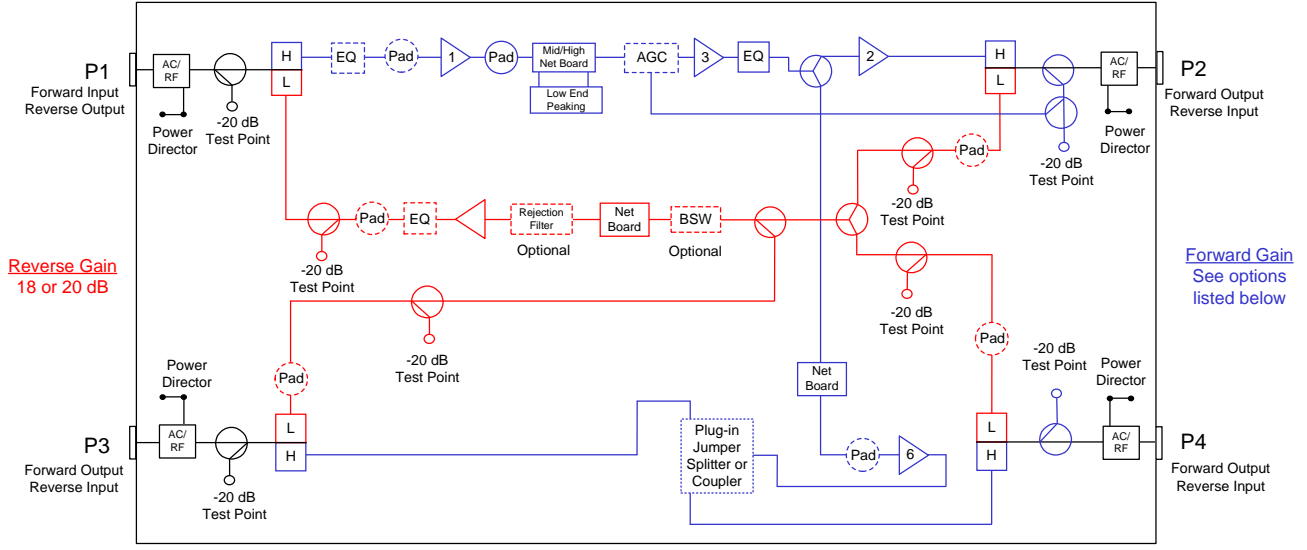
# Block Diagrams

## SDAT (Type 1) 1002 MHz GaN Amplifier Block Diagram



Note:  
1. Forward gain stated at 1002 MHz with DSIM AGC. Reverse gain stated at 42 MHz.

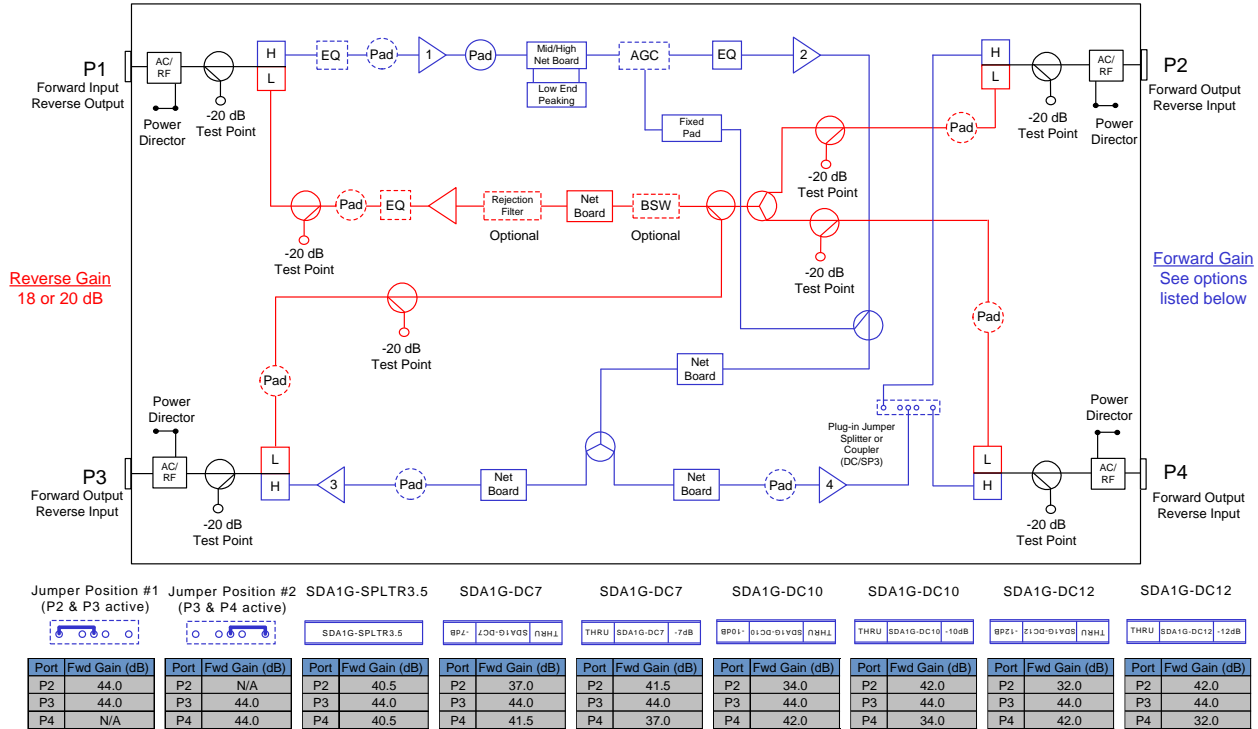
## SDAM (Type 7) 1002 MHz GaN Amplifier Block Diagram



| Jumper Position #1 | Jumper Position #2 | SDASPLTR3.5        | SDADC7             | SDADC7             | SDADC10            | SDADC10            | SDADC12            | SDADC12            |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Port Fwd Gain (dB) | Port Fwd Gain (dB) | Port Fwd Gain (dB) | Port Fwd Gain (dB) | Port Fwd Gain (dB) | Port Fwd Gain (dB) | Port Fwd Gain (dB) | Port Fwd Gain (dB) | Port Fwd Gain (dB) |
| P2 44.0            | P2 44.0            | P2 44.0            | P2 44.0            | P2 44.0            | P2 44.0            | P2 44.0            | P2 44.0            | P2 44.0            |
| P3 44.0            | P3 N/A             | P3 40.5            | P3 37.0            | P3 41.5            | P3 34.0            | P3 42.0            | P3 32.0            | P3 42.0            |
| P4 N/A             | P4 44.0            | P4 40.5            | P4 41.5            | P4 37.0            | P4 42.0            | P4 34.0            | P4 42.0            | P4 32.0            |

Notes:  
1. Forward gain stated at 1002 MHz with DSIM AGC.  
2. Reverse gain stated at 42, 85 or 204 MHz depending on the selected frequency split.  
3. Amplifiers are configured at the factory with jumper in Position #2 to have P2 & P4 active. Splitters and Couplers are sold separately.

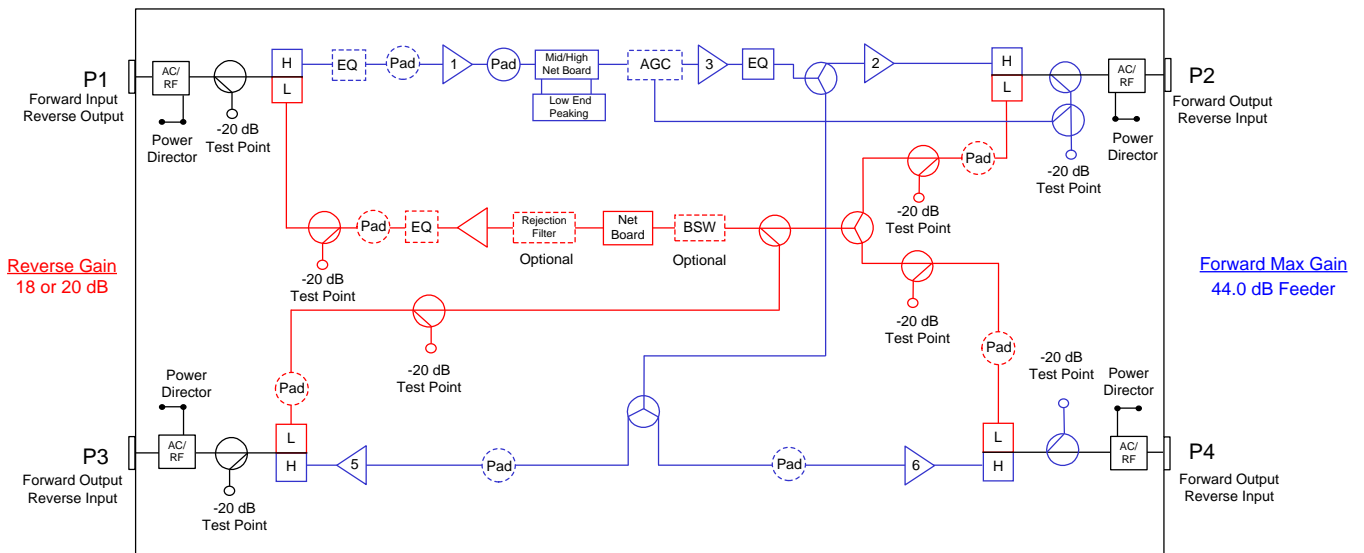
## SDAF (Type 2-TRI) 1002 MHz GaN Amplifier Block Diagram



**Notes:**

- Forward gain stated at 1002 MHz with DSIM AGC. Reverse gain stated at 42 MHz.
- Amplifiers are configured at the factory with jumper in Position #2 to have P3 & P4 active. Splitters and Couplers are sold separately.

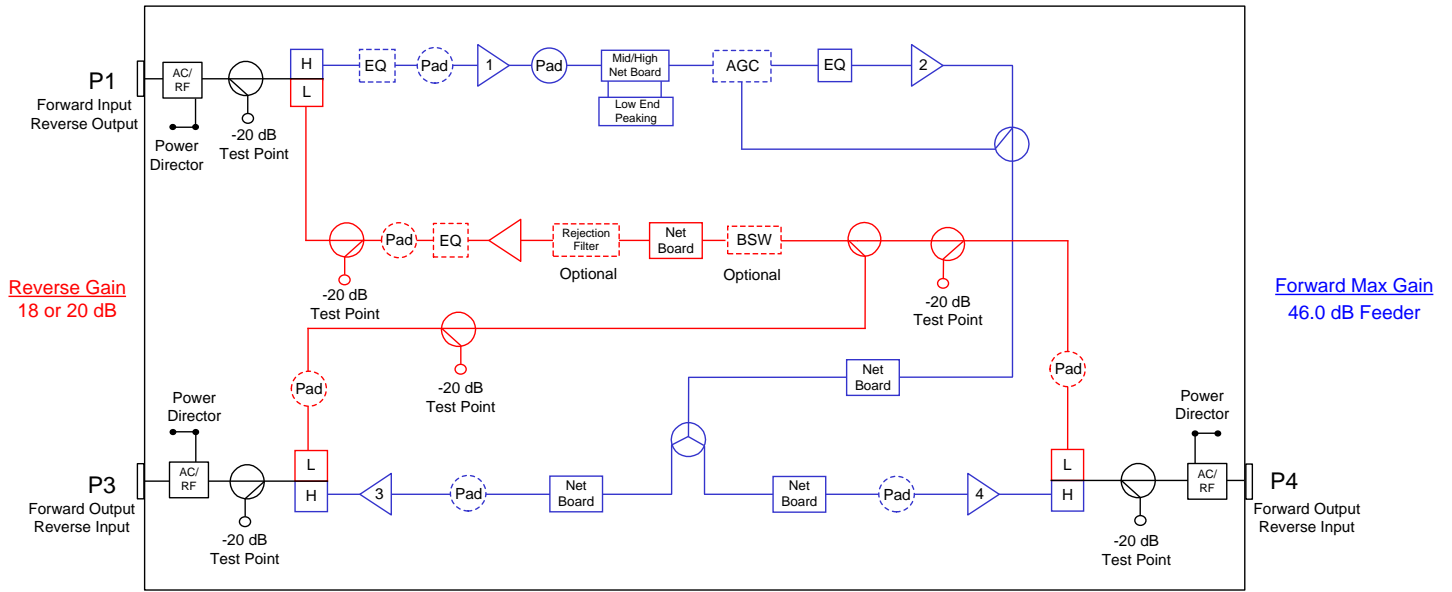
## SDBT (Type 6) 1002 MHz GaN Amplifier Block Diagram



**Note:**

- Forward gain stated at 1002 MHz with DSIM AGC. Reverse gain stated at 42 MHz.

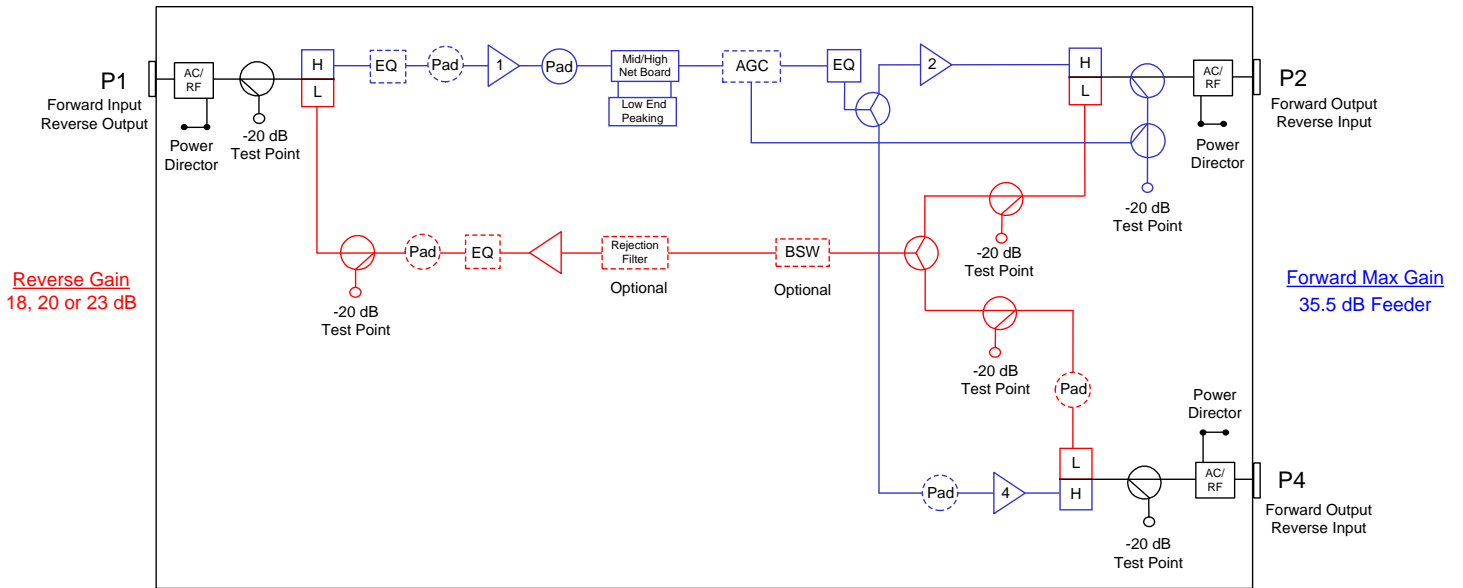
## SDAB (Type 2) 1002 MHz GaN Amplifier Block Diagram



Note:

1. Forward gain stated at 1002 MHz with DSIM AGC. Reverse gain stated at 42 MHz.

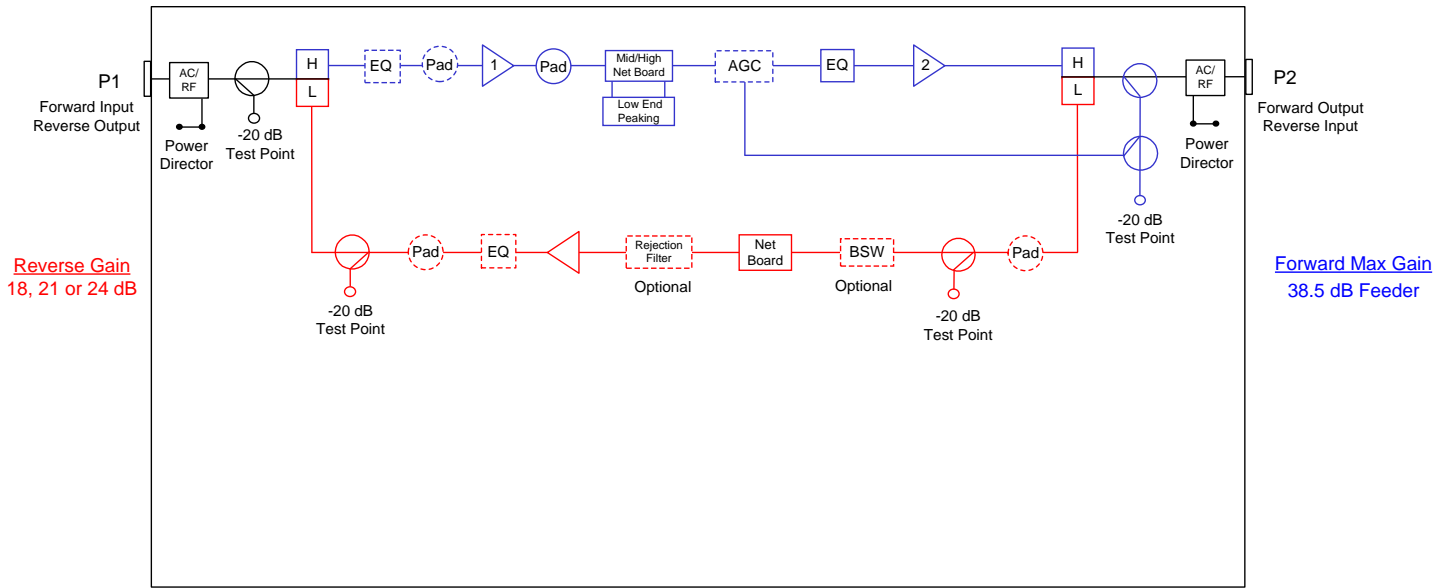
## SDLA (Type 3-Dual) 1002 MHz GaN Amplifier Block Diagram



Note:

1. Forward gain stated at 1002 MHz with DSIM AGC. Reverse gain stated at 42 MHz.

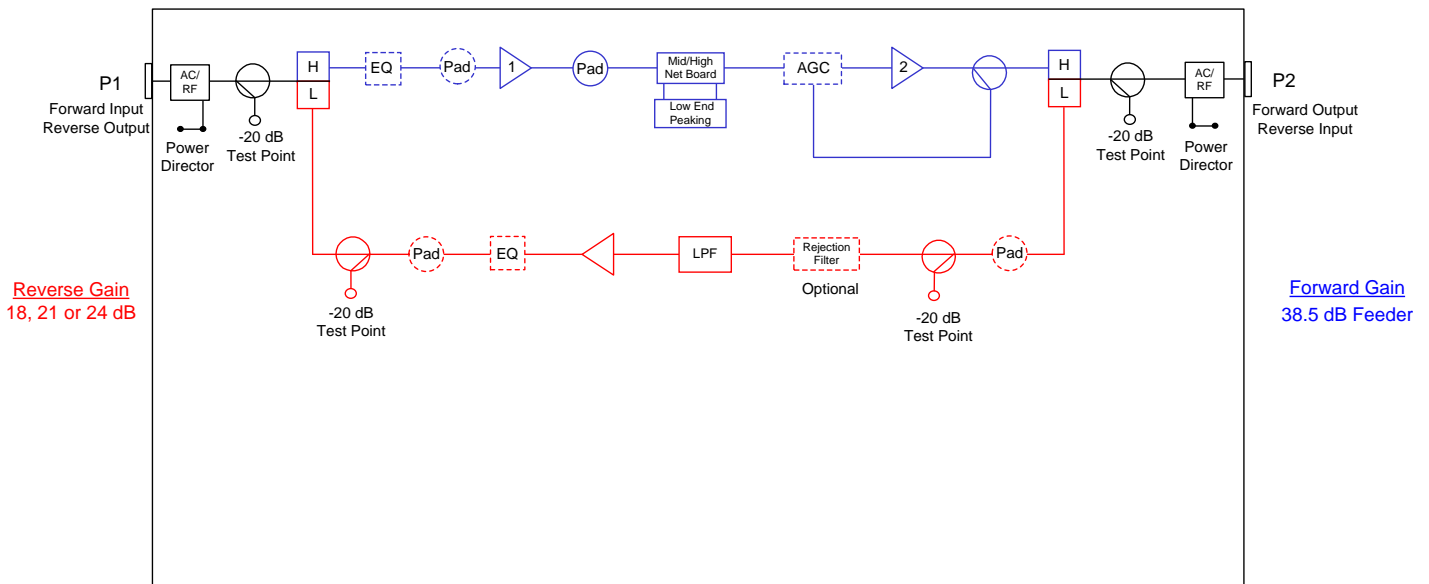
## SDLE (Type 3) 1002 MHz GaN Amplifier Block Diagram



Note:

1. Forward gain stated at 1002 MHz with DSIM AGC. Reverse gain stated at 42 MHz.

## ALX (Type 3) 1002 MHz GaN Amplifier Block Diagram



Note:

1. Forward gain stated at 1002 MHz with DSIM AGC. Reverse gain stated at 42 MHz.

# Station Parameters (SDAT, SDBT, SDAF, & SDAM) 17.2 dB Slope

| STATION PARAMETERS:   |  | 1002 MHz 42-53 MHz Split |       | SDA 1002 MHz With GaN Hybrids<br>17.2 dB Forward Slope @ 1002 MHz      |                    |                      |                      |
|---|--|--------------------------|-------|--|--------------------|----------------------|----------------------|
|   |  | CONDITIONS               | UNITS | SPECIFICATIONS   |                    |                      |                      |
| Housing passband  |  |                          | MHz   | 5 to 1002  |                    |                      |                      |
| Input current capacity  | Any port, worst case                             |                          | Amp   | 15   |                    |                      |                      |
| Hum modulation  | Time domain @<br>rated current above             |                          | -dBc  | 65 @ 5-42 MHz<br>69 @ 53-1002 MHz                                      |                    |                      |                      |
| Return loss   | Any port, worst case                             |                          | dB    | 17.0   |                    |                      |                      |
| <b>Test Points</b>  |  |                          |       |  |                    |                      |                      |
| Frequency range   |  |                          | MHz   | 5 to 42 (Reverse) / 53 to 1002 (Forward)                               |                    |                      |                      |
| Test point type   | Directional coupler                              |                          | N / A |  |                    |                      |                      |
| Test point level  | Forward & reverse                                |                          | -dB   | 20.0   |                    |                      |                      |
| Test point accuracy   | Forward & reverse                                |                          | ±dB   | 0.5  |                    |                      |                      |
| <b>Station Slope</b>  |  |                          |       |  |                    |                      |                      |
| Operational slope - trunk & feeders   | @ 53 / 550 / 1002 MHz                            |                          | dB    | 0 / 9.0 / 17.2   |                    |                      |                      |
| Slope control type  | Cable equalizers                                 |                          | dB    | Plug-in EQ's   |                    |                      |                      |
| Slope control range   | Includes cable equivalent                        |                          | dB    | -12.0 to +30.0   |                    |                      |                      |
| Slope control steps   | Equalizer value steps                            |                          | dB    | 0 - 18.0 (1.0 steps) & 20.0-30.0 (2.0 steps) -1.0 to -15.0 (1.0 steps) |                    |                      |                      |
| <b>Station Group Delay</b>  |  |                          |       |  |                    |                      |                      |
| Group delay   | Channel 2 (Std)                                  | nSec /<br>3.58 MHz       |       | 40 (35 Typical)  |                    |                      |                      |
| Group delay   | Channel 3  |                          |       | 16   |                    |                      |                      |
| Group delay   | Channel 4  |                          |       | 10   |                    |                      |                      |
| Group delay   | Channel 5 & >                                    |                          |       | 4  |                    |                      |                      |
| <b>AGC</b>  |  |                          |       |  |                    |                      |                      |
| Pilot Channel Type  |  |                          | N / A | DSIM-A Single Pilot Channel AGC<br>NTSC Analog or QAM                  |                    |                      |                      |
| Compensation Range  |  |                          | dB    | System compensation input change<br>+3/-6 @ 1002 MHz                   |                    |                      |                      |
| Accuracy  |  |                          | ±dB   | 0.5  |                    |                      |                      |
| Nominal loss  | @ 77 °F (25 °C)                                  |                          | dB    | 6.25   |                    |                      |                      |
| Center frequency bandwidth  |  |                          |       | 6 (MHz)  |                    |                      |                      |
| Configuration   |  |                          |       | SDAT<br>(Type 1)   | SDBT<br>(Type 6)   | SDAF<br>(Type 2-TRI) | SDAM<br>(Type 2-TRI) |
| <b>Operational Specifications</b>   |  |                          |       |  |                    |                      |                      |
| Station passband  |  |                          | MHz   | 53 to 1002   |                    |                      |                      |
| Station flatness - trunk out  | Normalized w / 0 dB slope                        |                          | ±dB   | 0.35   | -                  | -                    | -                    |
| Station flatness - feeder out   |  |                          | ±dB   | 0.6  | 0.6                | 0.6                  | 0.6                  |
| Gain - Port 2 (AGC / Manual)  | +0.5 / -0 @ 1002 MHz<br>(Temperature stabilized) |                          | dB    | 36 / 41  | 44 / 49            | -                    | 44 / 49              |
| Gain - Port 3 (AGC / Manual)  |  |                          | dB    | 46 / 51  | 44 / 49            | 44 / 49              | -                    |
| Gain - Port 4 (AGC / Manual)  |  |                          | dB    | 46 / 51  | 44 / 49            | 44 / 49              | 44 / 49              |
| Gain control type   |  |                          | N / A | Plug-in pads   |                    |                      |                      |
| Gain control steps  | Pad value steps                                  |                          | dB    | 0.5  |                    |                      |                      |
| <b>Station Output Levels Digital</b>  |  |                          |       |  |                    |                      |                      |
| Port 2  | @ 53 / 550 / 1002 MHz                            | dBmV                     |       | 21.8 / 30.8 / 39.0   | 31.8 / 40.8 / 49.0 | -                    | 31.8 / 40.8 / 49.0   |
| Port 3  |  |                          |       | 31.8 / 40.8 / 49.0   | 31.8 / 40.8 / 49.0 | 31.8 / 40.8 / 49.0   | -                    |
| Port 4  |  |                          |       | 31.8 / 40.8 / 49.0   | 31.8 / 40.8 / 49.0 | 31.8 / 40.8 / 49.0   | 31.8 / 40.8 / 49.0   |
| <b>Station Output Levels Analog</b>   |  |                          |       |  |                    |                      |                      |
| Port 2  | @ 53 / 550 / 1002 MHz                            | dBmV                     |       | 27.8 / 36.8 / 45.0   | 37.8 / 46.8 / 55.0 | -                    | 37.8 / 46.8 / 55.0   |
| Port 3  |  |                          |       | 37.8 / 46.8 / 55.0   | 37.8 / 46.8 / 55.0 | 37.8 / 46.8 / 55.0   | -                    |
| Port 4  |  |                          |       | 37.8 / 46.8 / 55.0   | 37.8 / 46.8 / 55.0 | 37.8 / 46.8 / 55.0   | 37.8 / 46.8 / 55.0   |
| <b>Station Noise Figure</b>   |  |                          |       |  |                    |                      |                      |
| Noise figure<br>(w / 1 dB for input EQ loss)  | Typ. @ 53 MHz                                    | dB                       |       | 11.2   | 14.8               | 12.1                 | 11.5                 |
|   | Typ. @ 550 MHz                                   | dB                       |       | 6.7  | 8.6                | 6.7                  | 7.0                  |
|   | Typ. @ 1002 MHz                                  | dB                       |       | 6.9  | 10.0               | 7.1                  | 7.8                  |
| <b>Station Distortions (Worse Case)</b>   |  |                          |       | Trunk / Feeder   | Feeder             | Feeder               | Feeder               |
| 550 MHz analog channel loading, 79 channels +450 MHz digital channel loading, 256 QAM at -6 dBc relative to its associated visual carrier |  |                          |       |  |                    |                      |                      |
| Composite Triple Beat (CTB)   |  | -dBc                     |       | 75 / 70  | 69                 | 72                   | 72                   |
| Cross Modulation (XMOD)   |  | -dBc                     |       | 74 / 65  | 68                 | 79                   | 72                   |
| Composite Second Order (CSO-)   | (Vc +0.75 & -1.25 MHz)                           | -dBc                     |       | 75 / 68  | 73                 | 69                   | 72                   |
| Composite Second Order (CSO+)   | (Vc +1.25 MHz)                                   | -dBc                     |       | 79 / 71  | 77                 | 72                   | 81                   |
| Carrier-to-Intermodulation Noise (CIN)  |  | -dBc                     |       | 73 / 68  | 67                 | 70                   | 70                   |

# Station Parameters (SDAT, SDBT, SDAF, & SDAM) 15.0 dB Slope

| STATION PARAMETERS:   |  | 1002 MHz 42-53 MHz Split |       | SDA 1002 MHz With GaN Hybrids<br>15.0 dB Forward Slope @ 1002 MHz          |                    |                      |                      |
|---|--|--------------------------|-------|--|--------------------|----------------------|----------------------|
|   |  | CONDITIONS               | UNITS | SPECIFICATIONS   |                    |                      |                      |
| Housing passband  |  |                          | MHz   | 5 to 1002  |                    |                      |                      |
| Input current capacity  | Any port, worst case                             |                          | Amp   | 15   |                    |                      |                      |
| Hum modulation  | Time domain @<br>rated current above             |                          | -dBc  | 65 @ 5-42 MHz<br>69 @ 53-1002 MHz  |                    |                      |                      |
| Return loss   | Any port, worst case                             |                          | dB    | 17.0   |                    |                      |                      |
| <b>Test Points</b>  |  |                          |       |  |                    |                      |                      |
| Frequency range   |  |                          | MHz   | 5 to 42 (Reverse) / 53 to 1002 (Forward)                                   |                    |                      |                      |
| Test point type   | Directional coupler                              |                          | N / A |  |                    |                      |                      |
| Test point level  | Forward & reverse                                |                          | -dB   | 20.0   |                    |                      |                      |
| Test point accuracy   | Forward & reverse                                |                          | ±dB   | 0.5  |                    |                      |                      |
| <b>Station Slope</b>  |  |                          |       |  |                    |                      |                      |
| Operational slope - trunk & feeders   | @ 53 / 550 / 1002 MHz                            |                          | dB    | 0 / 7.9 / 15.0   |                    |                      |                      |
| Slope control type  | Cable equalizers                                 |                          | dB    | Plug-in EQ's   |                    |                      |                      |
| Slope control range   | Includes cable equivalent                        |                          | dB    | -12.0 to +30.0   |                    |                      |                      |
| Slope control steps   | Equalizer value steps                            |                          | dB    | 0 - 18.0 (1.0 steps) & 20.0-30.0 (2.0 steps) -1.0 to -15.0 (1.0 steps)     |                    |                      |                      |
| <b>Station Group Delay</b>  |  |                          |       |  |                    |                      |                      |
| Group delay   | Channel 2 (Std)                                  | nSec /<br>3.58 MHz       |       | 40 (35 Typical)  |                    |                      |                      |
| Group delay   | Channel 3  |                          |       | 16   |                    |                      |                      |
| Group delay   | Channel 4  |                          |       | 10   |                    |                      |                      |
| Group delay   | Channel 5 & >                                    |                          |       | 4  |                    |                      |                      |
| <b>AGC</b>  |  |                          |       |  |                    |                      |                      |
| Pilot Channel Type  |  |                          | N / A | DSIM-A Single Pilot Channel AGC  |                    |                      |                      |
| Compensation Range  |  |                          | dB    | NTSC Analog or QAM<br>System compensation input change<br>+3/-6 @ 1002 MHz |                    |                      |                      |
| Accuracy  |  |                          | ±dB   | 0.5  |                    |                      |                      |
| Nominal loss  | @ 77 °F (25 °C)                                  |                          | dB    | 6.25   |                    |                      |                      |
| Center frequency bandwidth  |  |                          |       | 6 (MHz)  |                    |                      |                      |
| Configuration   |  |                          |       | SDAT<br>(Type 1)   | SDBT<br>(Type 6)   | SDAF<br>(Type 2-TR1) | SDAM<br>(Type 2-TR1) |
| <b>Operational Specifications</b>   |  |                          |       |  |                    |                      |                      |
| Station passband  |  |                          | MHz   | 53 to 1002   |                    |                      |                      |
| Station flatness - trunk out  | Normalized w / 0 dB slope                        |                          | ±dB   | 0.35   | -                  | -                    | -                    |
| Station flatness - feeder out   |  |                          | ±dB   | 0.6  | 0.6                | 0.6                  | 0.6                  |
| Gain - Port 2 (AGC / Manual)  | +0.5 / -0 @ 1002 MHz<br>(Temperature stabilized) |                          | dB    | 36 / 41  | 44 / 49            | -                    | 44 / 49              |
| Gain - Port 3 (AGC / Manual)  |  |                          | dB    | 46 / 51  | 44 / 49            | 44 / 49              | -                    |
| Gain - Port 4 (AGC / Manual)  |  |                          | dB    | 46 / 51  | 44 / 49            | 44 / 49              | 44 / 49              |
| Gain control type   |  |                          | N / A | Plug-in pads   |                    |                      |                      |
| Gain control steps  | Pad value steps                                  |                          | dB    | 0.5  |                    |                      |                      |
| <b>Station Output Levels - Digital</b>  |  |                          |       |  |                    |                      |                      |
| Port 2  | @ 53 / 550 / 1002 MHz                            | dBmV                     |       | 24.0 / 31.9 / 39.0   | 34.0 / 41.9 / 49.0 | -                    | 34.0 / 41.9 / 49.0   |
| Port 3  |  |                          |       | 34.0 / 41.9 / 49.0   | 34.0 / 41.9 / 49.0 | 34.0 / 41.9 / 49.0   | -                    |
| Port 4  |  |                          |       | 34.0 / 41.9 / 49.0   | 34.0 / 41.9 / 49.0 | 34.0 / 41.9 / 49.0   | 34.0 / 41.9 / 49.0   |
| <b>Station Output Levels - Analog</b>   |  |                          |       |  |                    |                      |                      |
| Port 2  | @ 53 / 550 / 1002 MHz                            | dBmV                     |       | 30.0 / 37.9 / 45.0   | 40.0 / 47.9 / 55.0 | -                    | 40.0 / 47.9 / 55.0   |
| Port 3  |  |                          |       | 40.0 / 47.9 / 55.0   | 40.0 / 47.9 / 55.0 | 40.0 / 47.9 / 55.0   | -                    |
| Port 4  |  |                          |       | 40.0 / 47.9 / 55.0   | 40.0 / 47.9 / 55.0 | 40.0 / 47.9 / 55.0   | 40.0 / 47.9 / 55.0   |
| <b>Station Noise Figure</b>   |  |                          |       |  |                    |                      |                      |
| Noise figure<br>(w / 1 dB for input EQ loss)  | Typ. @ 53 MHz                                    |                          | dB    | 11.2   | 14.8               | 12.1                 | 11.5                 |
|   | Typ. @ 550 MHz                                   |                          | dB    | 6.7  | 8.6                | 6.7                  | 7.0                  |
|   | Typ. @ 1002 MHz                                  |                          | dB    | 6.9  | 10.0               | 7.1                  | 7.8                  |
| <b>Station Distortions (Worse Case)</b>   |  |                          |       |  |                    |                      |                      |
|   |  |                          |       | Trunk / Feeder   | Feeder             | Feeder               | Feeder               |
| 550 MHz analog channel loading, 79 channels +450 MHz digital channel loading, 256 QAM at -6 dBc relative to its associated visual carrier |  |                          |       |  |                    |                      |                      |
| Composite Triple Beat (CTB)   |  |                          | -dBc  | 77 / 72  | 67                 | 74                   | 70                   |
| Cross Modulation (XMOD)   |  |                          | -dBc  | 76 / 67  | 66                 | 72                   | 70                   |
| Composite Second Order (CSO-)   | (Vc +0.75 & -1.25 MHz)                           |                          | -dBc  | 76 / 69  | 72                 | 70                   | 71                   |
| Composite Second Order (CSO+)   | (Vc +1.25 MHz)                                   |                          | -dBc  | 80 / 72  | 74                 | 73                   | 78                   |
| Carrier-to-Intermodulation Noise (CIN)  |  |                          | -dBc  | 75 / 70  | 65                 | 72                   | 68                   |

## Reverse Spectrum (SDAT, SDBT, SDAF, & SDAM)

| REVERSE SPECTRUM:  |  |  |                   |   |                  |                      |                      |
|--|--|--|-------------------|---|------------------|----------------------|----------------------|
| REVERSE - CHANNEL LOADING - Typically 23 each, 1.5 MHz wide QPSK channels. |  |  |                   |   |                  |                      |                      |
| Reverse - General  |  | CONDITIONS                                     | UNITS             | SPECIFICATION                               |                  |                      |                      |
| Station passband   |  |  | MHZ               | 5 to 42                                     |                  |                      |                      |
| Station flatness   |  | Normalized w / 0 dB slope                      | ±dB               | 0.5   |                  |                      |                      |
| Reverse - Station Gain   |  |  |                   |   |                  |                      |                      |
| Gain   |  | +0.5 / -0 @ 42 MHz<br>(Temperature stabilized) | dB                | 18 or 20 for SDAT, SDBT, SDAF & SDAM        |                  |                      |                      |
| Gain control type  |  |  |                   | Plug-in pads                                |                  |                      |                      |
| Gain control steps   |  | Pad value steps                                | dB                | 0.5   |                  |                      |                      |
| Reverse - Station Slope  |  |  |                   |   |                  |                      |                      |
| Slope control type   |  | Cable equalizers                               | N / A             | Plug-in EQs                                 |                  |                      |                      |
| Slope control range  |  |  | dB                | 0 to 12.0                                   |                  |                      |                      |
| Slope control steps  |  | Equalizer value steps                          | dB                | 1.0   |                  |                      |                      |
| Reverse - Station Output Levels  |  |  |                   |   |                  |                      |                      |
| @ Forward input port   |  | Average  | dBmV              | 35.0  |                  |                      |                      |
| Reverse - Station Distortions  |  |  |                   |   |                  |                      |                      |
| Composite Second Order (CSO)   |  | 6 channel loading                              | -dBc              | 82.0  |                  |                      |                      |
| Composite Tripe Beat (CTB)   |  |  |                   | 90.0  |                  |                      |                      |
| Cross Modulation (XMOD)  |  |  |                   | 80.0  |                  |                      |                      |
| Reverse - Station Group Delay  |  |  |                   |   |                  |                      |                      |
| Group delay  |  | 5 MHz  | nSec /<br>1.5 MHz | 36  |                  |                      |                      |
| Group delay  |  | 7 MHz  |                   | 16  |                  |                      |                      |
| Group delay  |  | 10 MHz   |                   | 6   |                  |                      |                      |
| Group delay  |  | 35 MHz   |                   | 10  |                  |                      |                      |
| Group delay  |  | 38.5 MHz                                       |                   | 33  |                  |                      |                      |
| Configuration  |  |  |                   | SDAT<br>(Type 1)                            | SDBT<br>(Type 6) | SDAF<br>(Type 2-TRI) | SDAM<br>(Type 2-TRI) |
| Reverse - Noise Figure   |  |  |                   |   |                  |                      |                      |
| Station noise figure (w / EQ)  |  | Across the bandwidth                           | dB                | 15.8  | 16.1             | 12.4                 | 15.0                 |
| Power Requirements:  |  |  |                   |   |                  |                      |                      |
| DSIM-A   |  | Includes reverse<br>(Worst case)               | W                 | 44.7  | 52.1             | 44.1                 | 45.5                 |
| Manual   |  |  | W                 | 42.6  | 50.0             | 42.0                 | 43.4                 |
| AC Voltage   |  |  |                   |   |                  |                      |                      |
| Input ranges   |  |  | VAC               | 45-90                                       |                  |                      |                      |
| Current Draw (with AGC)  |  |  |                   |   |                  |                      |                      |
| @ 45 VAC   |  | Maximum  | A                 | 1.41  | 1.58             | 1.39                 | 1.28                 |
| @ 50 VAC   |  |  | A                 | 1.17  | 1.36             | 1.16                 | 1.15                 |
| @ 60 VAC   |  |  | A                 | 1.03  | 1.20             | 1.02                 | 1.01                 |
| @ 70 VAC   |  |  | A                 | 0.93  | 1.09             | 0.92                 | 0.90                 |
| @ 80 VAC   |  |  | A                 | 0.86  | 1.00             | 0.85                 | 0.81                 |
| @ 90 VAC   |  |  | A                 | 0.80  | 0.94             | 0.79                 | 0.73                 |
| Weight   |  |  |                   | SDAT  | SDBT             | SDAF                 | SDAM                 |
| Weight   |  |  | lbs. (kg)         | 16.0 (7.26)                                 | 16.0 (7.26)      | 16.0 (7.26)          | 16.0 (7.26)          |
| Physical   |  |  |                   |   |                  |                      |                      |
| Dimensions   |  | (H X W X D)                                    | In, (cm)          | 6.75 X 14.25 X 9.00<br>(17.1 X 36.2 X 22.9) |                  |                      |                      |
| Environmental  |  |  |                   |   |                  |                      |                      |
| Operating temperature  |  |  | °F (°C)           | -40 to +140 (-40 to +60)                    |                  |                      |                      |



# Station Parameters (SDAB, SDLA, SDLE & ALX) 17.2 dB Slope

| STATION PARAMETERS: 1002 MHz 42-53 MHz Split  |  |                    | SDA 1002 MHz With GaN Hybrids<br>17.2 dB Forward Slope @ 1002 MHz |  |                       |                    |                    |
|---|--|--------------------|---|--|-----------------------|--------------------|--------------------|
|   |  | CONDITIONS         | UNITS   | SPECIFICATIONS   |                       |                    |                    |
| Housing passband  |  |                    | MHz   | 5 to 1002  |                       |                    |                    |
| Input current capacity  | Any port, worst case                             |                    | Amp   | 15   |                       |                    |                    |
| Hum modulation  | Time domain @<br>rated current above             |                    | -dBc  | 65 @ 5-42 MHz<br>69 @ 53-1002 MHz                                      |                       |                    |                    |
| Return loss   | Any port, worst case                             |                    | dB  | 17.0   |                       |                    |                    |
| <b>Test Points</b>  |  |                    |   |  |                       |                    |                    |
| Frequency range   |  |                    | MHz   | 5 to 42 (Reverse) / 53 to 1002 (Forward)                               |                       |                    |                    |
| Test point type   | Directional coupler                              |                    | N / A   |  |                       |                    |                    |
| Test point level  | Forward & reverse                                |                    | -dB   | 20.0   |                       |                    |                    |
| Test point accuracy   | Forward & reverse                                |                    | ±dB   | 0.5  |                       |                    |                    |
| <b>Station Slope</b>  |  |                    |   |  |                       |                    |                    |
| Operational slope -<br>trunk & feeders  | @ 53 / 550 / 1002 MHz                            |                    | dB  | 0 / 9.0 / 17.2   |                       |                    |                    |
| Slope control type  | Cable equalizers                                 |                    | dB  | Plug-in EQ's   |                       |                    |                    |
| Slope control range   | Includes cable equivalent                        |                    | dB  | -12.0 to +30.0   |                       |                    |                    |
| Slope control steps   | Equalizer value steps                            |                    | dB  | 0 - 18.0 (1.0 steps) & 20.0-30.0 (2.0 steps) -1.0 to -15.0 (1.0 steps) |                       |                    |                    |
| <b>Station Group Delay</b>  |  |                    |   |  |                       |                    |                    |
| Group delay   | Channel 2 (Std)                                  | nSec /<br>3.58 MHz |   | 40 (35 Typical)  |                       |                    |                    |
| Group delay   | Channel 3  |                    |   | 16   |                       |                    |                    |
| Group delay   | Channel 4  |                    |   | 10   |                       |                    |                    |
| Group delay   | Channel 5 & >                                    |                    |   | 4  |                       |                    |                    |
| <b>AGC</b>  |  |                    |   |  |                       |                    |                    |
| Pilot Channel Type  |  |                    | N / A   | DSIM-A Single Pilot Channel AGC<br>NTSC Analog or QAM                  |                       |                    |                    |
| Compensation Range  |  |                    | dB  | System compensation input change<br>+3/-6 @ 1002 MHz                   |                       |                    |                    |
| Accuracy  |  |                    | ±dB   | 0.5  |                       |                    |                    |
| Nominal loss  | @ 77 °F (25 °C)                                  |                    | dB  | 6.25   |                       |                    |                    |
| Center frequency bandwidth  |  |                    |   | 6 (MHz)  |                       |                    |                    |
| Configuration   |  |                    |   | SDAB<br>(Type 2)   | SDLA<br>(Type 3-DUAL) | SDLE<br>(Type 3)   | ALX<br>(Type 3)    |
| <b>Operational Specifications</b>   |  |                    |   |  |                       |                    |                    |
| Station passband  |  |                    | MHz   |  |                       |                    |                    |
| Station flatness - trunk out  | Normalized w / 0 dB slope                        |                    | ±dB   | -  | -                     | -                  | -                  |
| Station flatness - feeder out   |  |                    | ±dB   | 0.6  | 0.6                   | 0.35               | 0.35               |
| Gain - Port 2 (AGC / Manual)  | +0.5 / -0 @ 1002 MHz<br>(Temperature stabilized) |                    | dB  | -  | 35.5 / 40.5           | 38.5 / 43.5        | 38.5 / 43.5        |
| Gain - Port 3 (AGC / Manual)  |  |                    | dB  | 46 / 51  | -                     | -                  | -                  |
| Gain - Port 4 (AGC / Manual)  |  |                    | dB  | 46 / 51  | 35.5 / 40.5           | -                  | -                  |
| Gain control type   |  |                    |   | N / A  |                       |                    |                    |
| Gain control steps  | Pad value steps                                  |                    | dB  |  |                       |                    |                    |
| <b>Station Output Levels Digital</b>  |  |                    |   |  |                       |                    |                    |
| Port 2  | @ 53 / 550 / 1002 MHz                            |                    | dBmV  | -  | 31.8 / 40.8 / 49.0    | 31.8 / 40.8 / 49.0 | 31.8 / 40.8 / 49.0 |
| Port 3  |  |                    |   | 31.8 / 40.8 / 49.0   | -                     | -                  | -                  |
| Port 4  |  |                    |   | 31.8 / 40.8 / 49.0   | 31.8 / 40.8 / 49.0    | -                  | -                  |
| <b>Station Output Levels Analog</b>   |  |                    |   |  |                       |                    |                    |
| Port 2  | @ 53 / 550 / 1002 MHz                            |                    | dBmV  | -  | 37.8 / 46.8 / 55.0    | 37.8 / 46.8 / 55.0 | 37.8 / 46.8 / 55.0 |
| Port 3  |  |                    |   | 37.8 / 46.8 / 55.0   | -                     | -                  | -                  |
| Port 4  |  |                    |   | 37.8 / 46.8 / 55.0   | 37.8 / 46.8 / 55.0    | -                  | -                  |
| <b>Station Noise Figure</b>   |  |                    |   |  |                       |                    |                    |
| Noise figure<br>(w / 1 dB for input EQ loss)  | Typ. @ 53 MHz                                    |                    | dB  | 11.5   | 9.2                   | 9.3                | 8.9                |
|   | Typ. @ 550 MHz                                   |                    | dB  | 6.4  | 6.7                   | 6.9                | 7.9                |
|   | Typ. @ 1002 MHz                                  |                    | dB  | 7.0  | 7.7                   | 8.1                | 7.1                |
| <b>Station Distortions (Worse Case)</b>   |  |                    |   | Feeder   | Feeder                | Feeder             | Feeder             |
| 550 MHz analog channel loading, 79 channels +450 MHz digital channel loading, 256 QAM at -6 dBc relative to its associated visual carrier |  |                    |   |  |                       |                    |                    |
| Composite Triple Beat (CTB)   |  |                    | -dBc  | 69   | 71                    | 69                 | 72                 |
| Cross Modulation (XMOD)   |  |                    | -dBc  | 62   | 84                    | 70                 | 67                 |
| Composite Second Order (CSO-)   | (Vc +0.75 & -1.25 MHz)                           |                    | -dBc  | 68   | 75                    | 74                 | 76                 |
| Composite Second Order (CSO+)   | (Vc +1.25 MHz)                                   |                    | -dBc  | 74   | 75                    | 75                 | 75                 |
| Carrier-to-Intermodulation Noise (CIN)  |  |                    | -dBc  | 67   | 69                    | 67                 | 70                 |

## Station Parameters (SDAB, SDLA, SDLE & ALX) 15.0 dB Slope

| STATION PARAMETERS:   |  | 1002 MHz 42-53 MHz Split |       | SDA 1002 MHz With GaN Hybrids<br>15.0 dB Forward Slope @ 1002 MHz      |                       |                    |                    |
|---|--|--------------------------|-------|--|-----------------------|--------------------|--------------------|
|   |  | CONDITIONS               | UNITS | SPECIFICATIONS   |                       |                    |                    |
| Housing passband  |  |                          | MHz   | 5 to 1002  |                       |                    |                    |
| Input current capacity  | Any port, worst case                             |                          | Amp   | 15   |                       |                    |                    |
| Hum modulation  | Time domain @ rated current above                |                          | -dBc  | 65 @ 5-42 MHz<br>69 @ 53-1002 MHz                                      |                       |                    |                    |
| Return loss   | Any port, worst case                             |                          | dB    | 17.0   |                       |                    |                    |
| <b>Test Points</b>  |  |                          |       |  |                       |                    |                    |
| Frequency range   |  |                          | MHz   | 5 to 42 (Reverse) / 53 to 1002 (Forward)                               |                       |                    |                    |
| Test point type   | Directional coupler                              |                          | N / A |  |                       |                    |                    |
| Test point level  | Forward & reverse                                |                          | -dB   | 20.0   |                       |                    |                    |
| Test point accuracy   | Forward & reverse                                |                          | ±dB   | 0.5  |                       |                    |                    |
| <b>Station Slope</b>  |  |                          |       |  |                       |                    |                    |
| Operational slope - trunk & feeders   | @ 53 / 550 / 1002 MHz                            |                          | dB    | 0 / 7.9 / 15.0   |                       |                    |                    |
| Slope control type  | Cable equalizers                                 |                          | dB    | Plug-in EQ's   |                       |                    |                    |
| Slope control range   | Includes cable equivalent                        |                          | dB    | -12.0 to +30.0   |                       |                    |                    |
| Slope control steps   | Equalizer value steps                            |                          | dB    | 0 - 18.0 (1.0 steps) & 20.0-30.0 (2.0 steps) -1.0 to -15.0 (1.0 steps) |                       |                    |                    |
| <b>Station Group Delay</b>  |  |                          |       |  |                       |                    |                    |
| Group delay   | Channel 2 (Std)                                  | nSec /<br>3.58 MHz       |       | 40 (35 Typical)  |                       |                    |                    |
| Group delay   | Channel 3  |                          |       | 16   |                       |                    |                    |
| Group delay   | Channel 4  |                          |       | 10   |                       |                    |                    |
| Group delay   | Channel 5 & >                                    |                          |       | 4  |                       |                    |                    |
| <b>AGC</b>  |  |                          |       |  |                       |                    |                    |
| Pilot Channel Type  |  |                          | N / A | DSIM-A Single Pilot Channel AGC<br>NTSC Analog or QAM                  |                       |                    |                    |
| Compensation Range  |  |                          | dB    | System compensation input change<br>+3/-6 @ 1002 MHz                   |                       |                    |                    |
| Accuracy  |  |                          | ±dB   | 0.5  |                       |                    |                    |
| Nominal loss  | @ 77 °F (25 °C)                                  |                          | dB    | 6.25   |                       |                    |                    |
| Center frequency bandwidth  |  |                          |       | 6 (MHz)  |                       |                    |                    |
| Configuration   |  |                          |       | SDAB<br>(Type 2)   | SDLA<br>(Type 3-DUAL) | SDLE<br>(Type 3)   | ALX<br>(Type 3)    |
| <b>Operational Specifications</b>   |  |                          |       |  |                       |                    |                    |
| Station passband  |  |                          | MHz   |  |                       |                    |                    |
| Station flatness - trunk out  | Normalized w / 0 dB slope                        |                          | ±dB   | -  | -                     | -                  | -                  |
| Station flatness - feeder out   |  |                          | ±dB   | 0.6  | 0.6                   | 0.35               | 0.35               |
| Gain - Port 2 (AGC / Manual)  | +0.5 / -0 @ 1002 MHz<br>(Temperature stabilized) |                          | dB    | -  | 35.5 / 40.5           | 38.5 / 43.5        | 38.5 / 43.5        |
| Gain - Port 3 (AGC / Manual)  |  |                          | dB    | 46 / 51  | -                     | -                  | -                  |
| Gain - Port 4 (AGC / Manual)  |  |                          | dB    | 46 / 51  | 35.5 / 40.5           | -                  | -                  |
| Gain control type   |  |                          | N / A |  |                       |                    |                    |
| Gain control steps  | Pad value steps                                  |                          | dB    |  |                       |                    |                    |
| <b>Station Output Levels - Digital</b>  |  |                          |       |  |                       |                    |                    |
| Port 2  | @ 53 / 550 / 1002 MHz                            | dBmV                     |       | -  | 34.0 / 41.9 / 49.0    | 34.0 / 41.9 / 49.0 | 34.0 / 41.9 / 49.0 |
| Port 3  |  |                          |       | 34.0 / 41.9 / 49.0   | -                     | -                  | -                  |
| Port 4  |  |                          |       | 34.0 / 41.9 / 49.0   | 34.0 / 41.9 / 49.0    | -                  | -                  |
| <b>Station Output Levels - Analog</b>   |  |                          |       |  |                       |                    |                    |
| Port 2  | @ 53 / 550 / 1002 MHz                            | dBmV                     |       | -  | 40.0 / 47.9 / 55.0    | 40.0 / 47.9 / 55.0 | 40.0 / 47.9 / 55.0 |
| Port 3  |  |                          |       | 40.0 / 47.9 / 55.0   | -                     | -                  | -                  |
| Port 4  |  |                          |       | 40.0 / 47.9 / 55.0   | 40.0 / 47.9 / 55.0    | -                  | -                  |
| <b>Station Noise Figure</b>   |  |                          |       |  |                       |                    |                    |
| Noise figure<br>(w / 1 dB for input EQ loss)  | Typ. @ 53 MHz                                    | dB                       |       | 11.5   | 9.2                   | 9.3                | 8.9                |
|   | Typ. @ 550 MHz                                   | dB                       |       | 6.4  | 6.7                   | 6.9                | 7.9                |
|   | Typ. @ 1002 MHz                                  | dB                       |       | 7.0  | 7.7                   | 8.1                | 7.1                |
| <b>Station Distortions (Worse Case)</b>   |  |                          |       | Feeder   | Feeder                | Feeder             | Feeder             |
| 550 MHz analog channel loading, 79 channels +450 MHz digital channel loading, 256 QAM at -6 dBc relative to its associated visual carrier |  |                          |       |  |                       |                    |                    |
| Composite Triple Beat (CTB)   |  | -dBc                     |       | 71   | 73                    | 71                 | 69                 |
| Cross Modulation (XMOD)   |  | -dBc                     |       | 64   | 86                    | 72                 | 63                 |
| Composite Second Order (CSO-)   | (Vc +0.75 & -1.25 MHz)                           | -dBc                     |       | 69   | 76                    | 75                 | 73                 |
| Composite Second Order (CSO+)   | (Vc +1.25 MHz)                                   | -dBc                     |       | 75   | 76                    | 76                 | 74                 |
| Carrier-to-Intermodulation Noise (CIN)  |  | -dBc                     |       | 69   | 71                    | 69                 | 67                 |

## Reverse Spectrum (SDAB, SDLA, SDLE & ALX)

| REVERSE SPECTRUM:  |  |  |                   |   |                       |                  |   |
|--|--|--|-------------------|---|-----------------------|------------------|---|
| REVERSE - CHANNEL LOADING - Typically 23 each, 1.5 MHz wide QPSK channels. |  |  |                   |   |                       |                  |   |
| Reverse - General  |  | CONDITIONS                                     | UNITS             | SPECIFICATION   |                       |                  |   |
| Station passband   |  |  | MHZ               | 5 to 42   |                       |                  |   |
| Station flatness   |  | Normalized w / 0 dB slope                      | ±dB               | 0.5   |                       |                  |   |
| Reverse - Station Gain   |  |  |                   |   |                       |                  |   |
| Gain   |  | +0.5 / -0 @ 42 MHz<br>(Temperature stabilized) | dB                | 18 or 20 for SDAB<br>18, 20 or 23 for SDLA<br>18, 21 or 24 for SDLE & ALX |                       |                  |   |
| Gain control type  |  |  |                   | Plug-in pads  |                       |                  |   |
| Gain control steps   |  | Pad value steps                                | dB                | 0.5   |                       |                  |   |
| Reverse - Station Slope  |  |  |                   |   |                       |                  |   |
| Slope control type   |  | Cable equalizers                               | N / A             | Plug-in EQs   |                       |                  |   |
| Slope control range  |  |  | dB                | 0 to 12.0   |                       |                  |   |
| Slope control steps  |  | Equalizer value steps                          | dB                | 1.0   |                       |                  |   |
| Reverse - Station Output Levels  |  |  |                   |   |                       |                  |   |
| @ Forward input port   |  | Average  | dBmV              | 35.0  |                       |                  |   |
| Reverse - Station Distortions  |  |  |                   |   |                       |                  |   |
| Composite Second Order (CSO)   |  | 6 channel loading                              | -dBc              | 82.0  |                       |                  |   |
| Composite Tripe Beat (CTB)   |  |  |                   | 90.0  |                       |                  |   |
| Cross Modulation (XMOD)  |  |  |                   | 80.0  |                       |                  |   |
| Reverse - Station Group Delay  |  |  |                   |   |                       |                  |   |
| Group delay  |  | 5 MHz  | nSec /<br>1.5 MHz | 36  |                       |                  |   |
| Group delay  |  | 7 MHz  |                   | 16  |                       |                  |   |
| Group delay  |  | 10 MHz   |                   | 6   |                       |                  |   |
| Group delay  |  | 35 MHz   |                   | 10  |                       |                  |   |
| Group delay  |  | 38.5 MHz                                       |                   | 33  |                       |                  |   |
| Configuration  |  |  |                   | SDAB<br>(Type 2)  | SDLA<br>(Type 3-DUAL) | SDLE<br>(Type 3) | ALX<br>(Type 3)                             |
| Reverse - Noise Figure   |  |  |                   |   |                       |                  |   |
| Station noise figure (w / EQ)  |  | Across the bandwidth                           | dB                | 14.6  | 12.2                  | 10.0             | 9.7   |
| Power Requirements:  |  |  |                   |   |                       |                  |   |
| DSIM-A   |  | Includes reverse<br>(Worst case)               | W                 | 42.6  | 39.7                  | 26.8             | 26.3  |
| Manual   |  |  | W                 | 40.5  | 37.5                  | 24.6             | 24.2  |
| AC Voltage   |  |  |                   |   |                       |                  |   |
| Input ranges   |  |  | VAC               | 45-90   |                       |                  |   |
| Current Draw (with AGC)  |  |  |                   |   |                       |                  |   |
| @ 45 VAC   |  | Maximum  | A                 | 1.22  | 1.25                  | 0.85             | 0.75  |
| @ 50 VAC   |  |  | A                 | 1.14  | 1.05                  | 0.72             | 0.63  |
| @ 60 VAC   |  |  | A                 | 1.04  | 0.92                  | 0.64             | 0.58  |
| @ 70 VAC   |  |  | A                 | 0.94  | 0.84                  | 0.59             | 0.51  |
| @ 80 VAC   |  |  | A                 | 0.85  | 0.77                  | 0.55             | 0.46  |
| @ 90 VAC   |  |  | A                 | 0.78  | 0.72                  | 0.50             | 0.42  |
| Weight   |  |  |                   | SDAB  | SDLA                  | SDLE             | ALX   |
| Weight   |  |  | lbs. (kg)         | 16.0 (7.26)   | 14.5 (6.58)           | 14.5 (6.58)      | 11.0 (4.99)                                 |
| Physical   |  |  |                   |   |                       |                  |   |
| Dimensions   |  | (H X W X D)                                    | In, (cm)          | 6.75 X 14.25 X 9.00<br>(17.1 X 36.2 X 22.9)                               |                       |                  | 4.00 X 14.25 X 9.00<br>(10.2 X 36.2 X 22.9) |
| Environmental  |  |  |                   |   |                       |                  |   |
| Operating temperature  |  |  | °F (°C)           | -40 to +140 (-40 to +60)  |                       |                  |   |

# Ordering Matrix

## SDA & ALX 15 Amp 1002 MHz GaN Product Configuration Worksheet

Customer: \_\_\_\_\_

Created By: \_\_\_\_\_ Order Date: \_\_\_\_\_

### ORDERING MATRIX

April 22, 2021

|             |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|-------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| Position    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| PART NUMBER |   |   |   |   |   |   | B |   |   |    |    |    |    |    |    |

- 1  STATION TYPE  
 A = ALX 1 Output Low Profile LE      D = SDLA 2 Output LE      L = SDLE 1 Output LE  
 B = SDAB 2 Output Feeder      F = SDAF 2 or 3 Output Feeder      T = SDAT 3 Output Trunk  
 J = SDBT 3 Equal Output Feeder      W = SDAM 2 or 3 Output Feeder

- 2  BANDWIDTH FREQUENCY  
 1 = 1002 MHz Upper Frequency

- 3,4  STATION GAIN (Forward) - For 0.5 dB gain values, use the first two digits listed in the part number

| Station Type               | TYPE 1 | TYPE 6 | TYPE 2 TRI | TYPE 2 TRI | TYPE 2 | TYPE 3 DUAL | TYPE 3 | TYPE 3 |
|----------------------------|--------|--------|------------|------------|--------|-------------|--------|--------|
| Amplifier Model            | SDAT   | SDBT   | SDAF       | SDAM       | SDAB   | SDLA        | SDLE   | ALX    |
| Max gain with AGC/ Thermal | 36     | 44     | 44         | 44         | 46     | 35.5        | 38.5   | 38.5   |
| Max gain w/AGC bypass      | 41     | 49     | 49         | 49         | 51     | 40.5        | 43.5   | 43.5   |

- 5,6  CONTROL TYPE  
 D2 = DSIM-A Single Pilot AGC (Analog or Digital pilot) - Pilot channel loaded during setup  
 M1 = Manual (AGC Bypass)

- 7  CURRENT PASSING CAPACITY 15A (Continuous on all ports)

- 8  STATION SLOPE
- |     | 54-1002 | 105-1002 | 258-1002 |
|-----|---------|----------|----------|
| E=  | 17.2    | 16.2     | 13.7     |
| F=  | 15.0    | 14.0     | 11.5     |
| T=  | 14.0    | 13.0     | 10.5     |
| *K= | 7.9     | 6.9      | 4.4      |

\*Slope option "K" is only available on the SDLE and SDLA 1002 MHz stations

- 9  HOUSING OPTIONS  
 0 = No housing or power pack      B = SDA - Standard with TP (Same as option E)  
 1 = Module upgrade kit with power supply and seizure screws      G = ALX - Standard low profile line extender with TP  
 E = SDA - Standard with TP  
 C = SDA - Standard with TP (Same as option E)

- 10  DIPLEX FREQUENCY SPLIT  
 4 =42 / 53      5 =55 / 70      6 =65 / 85      8 =85 / 105      2 =204 / 258

- 11  STATION GAIN (Reverse)  
 0 = None      4 = 18 dB min (SDA: T, B, F, M, LA, BT)      J = 20 dB min (SDA: T, B, F, M, LA, BT)  
 1 = Passive      H = 18 dB min (SDLE & ALX)      T = 23 dB min (SDA: B, LA)  
    R = 21 dB min (SDLE, LA & ALX)      U = 24 dB min (SDLE & ALX)

- 12  SURGE PROTECTION  
 A = Version 5 SDA 45-90 VAC power supply and plug-in sidactor  
 F = ALX with plug-in sidactor & fuse holder on power supply cover  
 C = No Sidactor - Triac only (Included in the SDA power supply)  
 \* For SDA module only units, select the power supply version that is in the current complete station.

- 13,14   TEST SPECS (Determined by ACI engineering)

- 15  SPECIAL/CUSTOMER: LABELS, FUNCTIONS, (Determined by Product Management)  
 0, 1 = No special instructions      A = GaN Hybrids & Pad adjustable EQ's      N = GaN Forward Hybrids

Generic Order Form: Not all configurations are available

## Accessory Ordering Information:

The SDA ordering matrix provides the part number information to order the configured stations. This page contains the ordering information for the required accessories that will be needed to make the stations functional in the field or the optional accessories that can be ordered separately.

### Required Accessories (For using fixed value plug-in equalizers)

| Description   | Part Numbers<br>(Where XX.X = dB value)  |
|---|--|
| JXP style attenuator pads <ul style="list-style-type: none"> <li>• 1 Required for forward input</li> <li>• 1 Required for reverse output (if active)</li> </ul> | JXP1.38-XX.X (0 to 20 dB in 0.5 dB steps)  |
| Forward equalizers <ul style="list-style-type: none"> <li>• 1 Required forward input</li> </ul>   | EQDA1G/XX (1.0 to 18.0 dB in 1.0 dB steps)<br>(20.0 to 30.0 dB in 2.0 dB steps)<br>CEQ1G/XX (1.0 to 15.0 dB in 1.0 dB steps)         |
| Reverse equalizers <ul style="list-style-type: none"> <li>• 1 Required reverse output (if active)</li> </ul>  | REQDA42/XX (0 to 12.0 dB in 1.0 dB steps)<br>REQDA85/XX (1 to 12.0 dB in 1.0 dB steps)<br>REQDA204/XX (1 to 12.0 dB in 1.0 dB steps) |

### Split Conversion Kits - 85/105

| Description                               | Part Numbers |
|---|--------------|
| <b>SDA 1G GaN with 14.0 dB Slope</b>      |              |
| Conversion Kit, 85/105 SDAT 14.0 dB Slope | 120586-01    |
| Conversion Kit, 85/105 SDBT 14.0 dB Slope | 120587-01    |
| Conversion Kit, 85/105 SDAF 14.0 dB Slope | 120588-01    |
| Conversion Kit, 85/105 SDAM 14.0 dB Slope | 120593-01    |
| Conversion Kit, 85/105 SDAB 14.0 dB Slope | 120589-01    |
| Conversion Kit, 85/105 SDLA 14.0 dB Slope | 120590-01    |
| Conversion Kit, 85/105 SDLE 14.0 dB Slope | 120591-01    |
| Conversion Kit, 85/105 ALX 14.0 dB Slope  | 120592-01    |
| <b>SDA 1G GaN with 16.2 dB Slope</b>      |              |
| Conversion Kit, 85/105 SDAT 16.2 dB Slope | 120586-02    |
| Conversion Kit, 85/105 SDBT 16.2 dB Slope | 120587-02    |
| Conversion Kit, 85/105 SDAF 16.2 dB Slope | 120588-02    |
| Conversion Kit, 85/105 SDAM 16.2 dB Slope | 120593-02    |
| Conversion Kit, 85/105 SDAB 16.2 dB Slope | 120589-02    |
| Conversion Kit, 85/105 SDLA 16.2 dB Slope | 120590-02    |
| Conversion Kit, 85/105 SDLE 16.2 dB Slope | 120591-02    |
| Conversion Kit, 85/105 ALX 16.2 dB Slope  | 120592-02    |

## Optional Accessories

| Description  | Part Numbers  |
|--|---|
| Digital Station Intelligence Manager - Single Pilot AGC Module (Analog or Digital)       | DSIM-A-MDL-02   |
| Digital Station Intelligence Manager -Controller   | DSCT-xxx-yyy<br>xxx = Pilot Channel Number<br>yyy = Channel Type<br>IRC = Analog IRC Spacing<br>DIG = Digital / QAM |
| Digital Station Intelligence Manager - Cable Assembly For Computer Interface             | 240327-01   |
| DSIM Bluetooth Dongle Apple iOS or android   | DSIM-DONGLE-02  |
| Cable assembly DSIM adaptor to connect controller  | 240330-01   |
| Manual AGC (Bypass plug-in)  | AGC-BYPASS-1G   |
| Pad Adjustable Equalizer JXP Platform 0-18 dB  | AEQDA1G   |
| Pad Adjustable Cable Equivalent Equalizers JXP Platform Low Range 0-8 dB                 | ACEQ1G  |
| Pad Adjustable Cable Equivalent Equalizers JXP Platform High Range 9-15 dB               | ACEQH1G   |
| Pad Adjustable Reverse Equalizers 5-42, 85 and 204 MHz JXP Platform 0-12 dB              | AREQDA42<br>AREQDA85<br>AREQDA204   |
| Reverse Rejection Filter 14 MHz  | RPRFLTR-14  |
| Reverse Rejection Filter 8 MHz   | RPRFLTR-8   |
| Reverse Rejection Filter by-pass   | RPRFLTR-JMP   |
| DC/SP3 Plug-in - SDAF only   | SDA1G-SPLTR3.5<br>SDA1G-DC10<br>SDA1G-DC7<br>SDA1G-DC12   |
| DC/SP3 Plug-in - SDAM only   | SDASPLTR3.5<br>SDADC7<br>SDADC10<br>SDADC12   |
| Test Probe (5.5" Long)   | 100685-01   |
| Test Probe (1.57" / 4 cm Long)   | TP-7504   |
| Test Adapter for Test Probe to Seizure Screw (RF Connector)                              | 100677  |
| Thru-housing Test Cable. Allows reading of internal test points with the housing closed. | 240310  |
| AC Power Director  | 100818-01   |
| EQ Puller Tool   | 130311  |
| Nut Driver 1/2"  | 130312  |
| Nut Driver 5/8"  | 130313  |

## Optional Accessories (Continued)

| Description                        | Part Numbers |
|------------------------------------|--------------|
| Power Supply (45-90 VAC) Version 5 | SDA90VSP-V5  |
| Replacement SDA Housing            | HSG03/00     |
| Replacement ALX Housing            | HSG15/00     |
| Metal 5/8" Port Housing Caps       | H5/8PLUG     |
| Housing Port Dielectric Insert     | 030770-01    |
| Seizure Screw / RF Connector 15A   | 100633-01    |



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