

## Preliminary Data Sheet Supplement

|                              |                                                                        |
|------------------------------|------------------------------------------------------------------------|
| <b>Subject:</b>              | New PQFP80 Package for DPL 35xxA                                       |
| <b>Data Sheet Concerned:</b> | DPL 3520A, DPL 3519A, DPL 3518A<br>6251-423-1PD, Edition July 31, 1997 |
| <b>Supplement:</b>           | No. 7 / 6251-423-2PDS                                                  |
| <b>Edition:</b>              | Sept. 25, 2000                                                         |

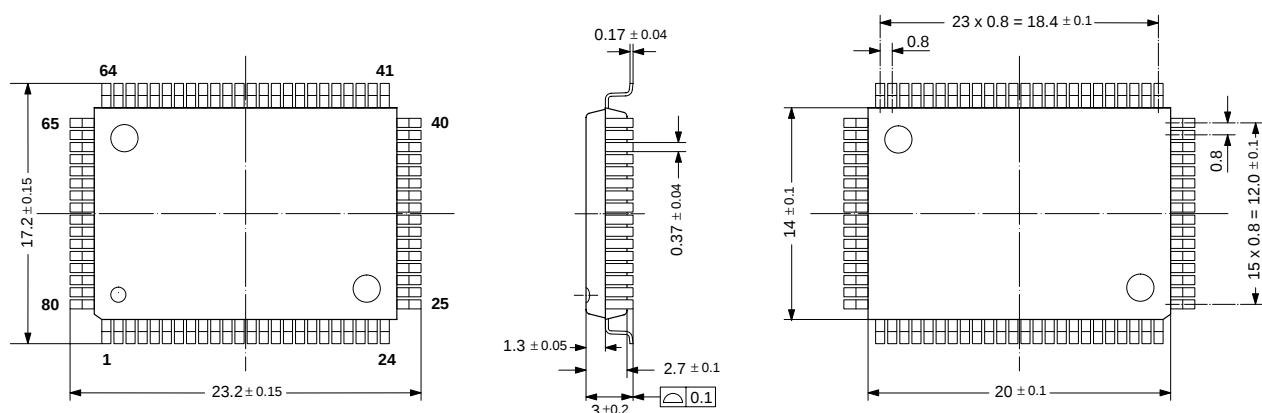
**New PQFP80 Package for the DPL 35xxA**

1. The DPL 35xxA is also available in the PQFP80 package.
2. Production of the PLCC68, PSDIP64, and PSDIP52 packages will continue.

Attachment: Package Information DPL 35xxA

## 1. Specifications

### 1.1. Outline Dimensions



SPGS705000-3(P80)/1E

**Fig. 1-1:**  
80-Pin Plastic Quad Flat Pack Package  
(PQFP80)  
Weight approximately 1.61 g  
Dimensions in mm

### 1.2. Pin Connections and Short Descriptions

NC = not connected; leave vacant

LV = if not used, leave vacant

DVSS: if not used, connect to DVSS

X = obligatory; connect as described in circuit diagram

AHVSS: connect to AHVSS

| Pin No.        |                 |                 |                | Pin Name    | Type   | Connection<br>(if not used) | Short Description            |
|----------------|-----------------|-----------------|----------------|-------------|--------|-----------------------------|------------------------------|
| PLCC<br>68-pin | PSDIP<br>64-pin | PSDIP<br>52-pin | PQFP<br>80-pin |             |        |                             |                              |
| 1              | 16              | 14              | 9              | NC          |        | LV                          | Not connected                |
| 2              | —               | —               | —              | NC          |        | LV                          | Not connected                |
| 3              | 15              | 13              | 8              | NC          |        | LV                          | Not connected                |
| 4              | 14              | 12              | 7              | I2S_DA_IN1  | IN     | LV                          | I <sup>2</sup> S1 data input |
| 5              | 13              | 11              | 6              | I2S_DA_OUT1 | OUT    | LV                          | I <sup>2</sup> S data output |
| 6              | 12              | 10              | 5              | I2S_WS      | OUT    | LV                          | I <sup>2</sup> S wordstrobe  |
| 7              | 11              | 9               | 4              | I2S_CL      | OUT    | LV                          | I <sup>2</sup> S clock       |
| 8              | 10              | 8               | 3              | I2C_DA      | IN/OUT | X                           | I <sup>2</sup> C data        |
| 9              | 9               | 7               | 2              | I2C_CL      | IN     | X                           | I <sup>2</sup> C clock       |
| 10             | 8               | —               | 1              | NC          |        | LV                          | Not connected                |
| 11             | 7               | 6               | 80             | STANDBYQ    | IN     | X                           | Standby (low-active)         |

| Pin No.        |                 |                 |                | Pin Name   | Type   | Connection<br>(if not used) | Short Description                   |
|----------------|-----------------|-----------------|----------------|------------|--------|-----------------------------|-------------------------------------|
| PLCC<br>68-pin | PSDIP<br>64-pin | PSDIP<br>52-pin | PQFP<br>80-pin |            |        |                             |                                     |
| 12             | 6               | 5               | 79             | ADR_SEL    | IN     | X                           | I <sup>2</sup> C Bus address select |
| 13             | 5               | 4               | 78             | D_CTR_IO0  | IN/OUT | LV                          | Digital control input/output 0      |
| 14             | 4               | 3               | 77             | D_CTR_IO1  | IN/OUT | LV                          | Digital control input/output 1      |
| 15             | 3               | –               | 76             | NC         |        | LV                          | Not connected                       |
| 16             | 2               | –               | 75             | NC         |        | LV                          | Not connected                       |
| 17             | –               | –               | –              | NC         |        | LV                          | Not connected                       |
| 18             | 1               | 2               | 74             | AUD_CL_OUT | OUT    | LV                          | Audio clock output                  |
| 19             | 64              | 1               | 73             | D_CTR_IN   | IN     | LV                          | Digital control input               |
| 20             | 63              | 52              | 72             | XTAL_OUT   | OUT    | X                           | Crystal oscillator                  |
| 21             | 62              | 51              | 71             | XTAL_IN    | IN     | X                           | Crystal oscillator                  |
| 22             | 61              | 50              | 70             | TESTEN     | IN     | X                           | Test pin                            |
| 23             | 60              | 49              | 69             | NC         |        | LV                          | Not connected                       |
| 24             | 59              | 48              | 68             | NC         |        | LV                          | Not connected                       |
| 25             | 58              | 47              | 67             | NC         |        | LV                          | Not connected                       |
| 26             | 57              | 46              | 66             | AVSUP      |        | X                           | Analog power supply +5 V            |
| –              | –               | –               | 65             | AVSUP      |        | X                           | Analog power supply +5 V            |
| –              | –               | –               | 64             | NC         |        | LV                          | Not connected                       |
| –              | –               | –               | 63             | NC         |        | LV                          | Not connected                       |
| 27             | 56              | 45              | 62             | AVSS       |        | X                           | Analog ground                       |
| –              | –               | –               | 61             | AVSS       |        | X                           | Analog ground                       |
| 28             | 55              | 44              | 60             | MONO_IN    | IN     | LV                          | Mono input                          |
| –              | –               | –               | 59             | NC         |        | LV                          | Not connected                       |
| 29             | 54              | 43              | 58             | VREFTOP    |        | X                           | Reference voltage                   |
| 30             | 53              | 42              | 57             | SC1_IN_R   | IN     | LV                          | Scart input 1 in, right             |
| 31             | 52              | 41              | 56             | SC1_IN_L   | IN     | LV                          | Scart input 1 in, left              |
| 32             | 51              | –               | 55             | ASG1       |        | AHVSS                       | Analog Shield Ground 1              |
| 33             | 50              | 40              | 54             | SC2_IN_R   | IN     | LV                          | Scart input 2 in, right             |
| 34             | 49              | 39              | 53             | SC2_IN_L   | IN     | LV                          | Scart input 2 in, left              |
| 35             | 48              | –               | 52             | ASG2       |        | AHVSS                       | Analog Shield Ground 2              |
| 36             | 47              | 38              | 51             | SC3_IN_R   | IN     | LV                          | Scart input 3 in, right             |

| Pin No.        |                 |                 |                | Pin Name  | Type | Connection<br>(if not used) | Short Description                             |
|----------------|-----------------|-----------------|----------------|-----------|------|-----------------------------|-----------------------------------------------|
| PLCC<br>68-pin | PSDIP<br>64-pin | PSDIP<br>52-pin | PQFP<br>80-pin |           |      |                             |                                               |
| 37             | 46              | 37              | 50             | SC3_IN_L  | IN   | LV                          | Scart input 3 in, left                        |
| 38             | –               | –               | 49             | ASG4      |      | AHVSS                       | Analog Shield Ground 4                        |
| 39             | 45              | –               | 48             | NC        |      | LV                          | Not connected                                 |
| 40             | 44              | –               | 47             | NC        |      | LV                          | Not connected                                 |
| 41             | 43              | –               | 46             | NC        |      | LV                          | Not connected                                 |
| 42             | 42              | 36              | 45             | AGNDC     |      | X                           | Analog reference voltage<br>high voltage part |
| 43             | 41              | 35              | 44             | AHVSS     |      | X                           | Analog ground                                 |
| –              | –               | –               | 43             | AHVSS     |      | X                           | Analog ground                                 |
| –              | –               | –               | 42             | NC        |      | LV                          | Not connected                                 |
| –              | –               | –               | 41             | NC        |      | LV                          | Not connected                                 |
| 44             | 40              | 34              | 40             | CAPL_C1   |      | X                           | Volume capacitor chan. 1                      |
| 45             | 39              | 33              | 39             | AHVSUP    |      | X                           | Analog power supply 8.0 V                     |
| 46             | 38              | 32              | 38             | CAPL_C2   |      | X                           | Volume capacitor chan. 2                      |
| 47             | 37              | 31              | 37             | SC1_OUT_L | OUT  | LV                          | Scart output 1, left                          |
| 48             | 36              | 30              | 36             | SC1_OUT_R | OUT  | LV                          | Scart output 1, right                         |
| 49             | 35              | 29              | 35             | VREF1     |      | X                           | Reference ground 1 high<br>voltage part       |
| 50             | 34              | 28              | 34             | SC2_OUT_L | OUT  | LV                          | Scart output 2, left                          |
| 51             | 33              | 27              | 33             | SC2_OUT_R | OUT  | LV                          | Scart output 2, right                         |
| 52             | 30              | –               | 32             | ASG3      |      | AHVSS                       | Analog Shield Ground 3                        |
| 53             | –               | –               | 31             | NC        |      | LV                          | Not connected                                 |
| 54             | –               | –               | 30             | NC        |      | LV                          | Not connected                                 |
| 55             | –               | –               | 29             | NC        |      | LV                          | Not connected                                 |
| 56             | 29              | 25              | 28             | DACC1_L   | OUT  | LV                          | Analog output channel 1,<br>left              |
| 57             | 28              | 24              | 27             | DACC1_R   | OUT  | LV                          | Analog output channel 1,<br>right             |
| 58             | 27              | 23              | 26             | VREF2     |      | X                           | Reference ground 2 high<br>voltage part       |
| 59             | 26              | 22              | 25             | DACC2_L   | OUT  | LV                          | Analog output channel 2,<br>left              |
| 60             | 25              | 21              | 24             | DACC2_R   | OUT  | LV                          | Analog output channel 2,<br>right             |

| Pin No.        |                 |                 |                | Pin Name    | Type | Connection<br>(if not used) | Short Description             |
|----------------|-----------------|-----------------|----------------|-------------|------|-----------------------------|-------------------------------|
| PLCC<br>68-pin | PSDIP<br>64-pin | PSDIP<br>52-pin | PQFP<br>80-pin |             |      |                             |                               |
| –              | –               | –               | 23             | NC          |      | LV                          | Not connected                 |
| –              | –               | –               | 22             | NC          |      | LV                          | Not connected                 |
| 61             | 24              | 20              | 21             | RESETQ      | IN   | X                           | Power-on-reset                |
| 62             | 23              | –               | 20             | NC          |      | LV                          | Not connected                 |
| 63             | 22              | –               | 19             | NC          |      | LV                          | Not connected                 |
| 64             | 21              | 19              | 18             | I2S_DA_OUT2 | OUT  | LV                          | I <sup>2</sup> S2-data output |
| 65             | 20              | 18              | 17             | I2S_DA_IN2  | IN   | LV                          | I <sup>2</sup> S2-data input  |
| 66             | 19              | 17              | 16             | DVSS        |      | X                           | Digital ground                |
| –              | –               | –               | 15             | DVSS        |      | X                           | Digital ground                |
| –              | –               | –               | 14             | DVSS        |      | X                           | Digital ground                |
| 67             | 18              | 16              | 13             | DVSUP       |      | X                           | Digital power supply +5 V     |
| –              | –               | –               | 12             | DVSUP       |      | X                           | Digital power supply +5 V     |
| –              | –               | –               | 11             | DVSUP       |      | X                           | Digital power supply +5 V     |
| 68             | 17              | 15              | 10             | NC          |      | LV                          | Not connected                 |

1.3. Pin Configuration

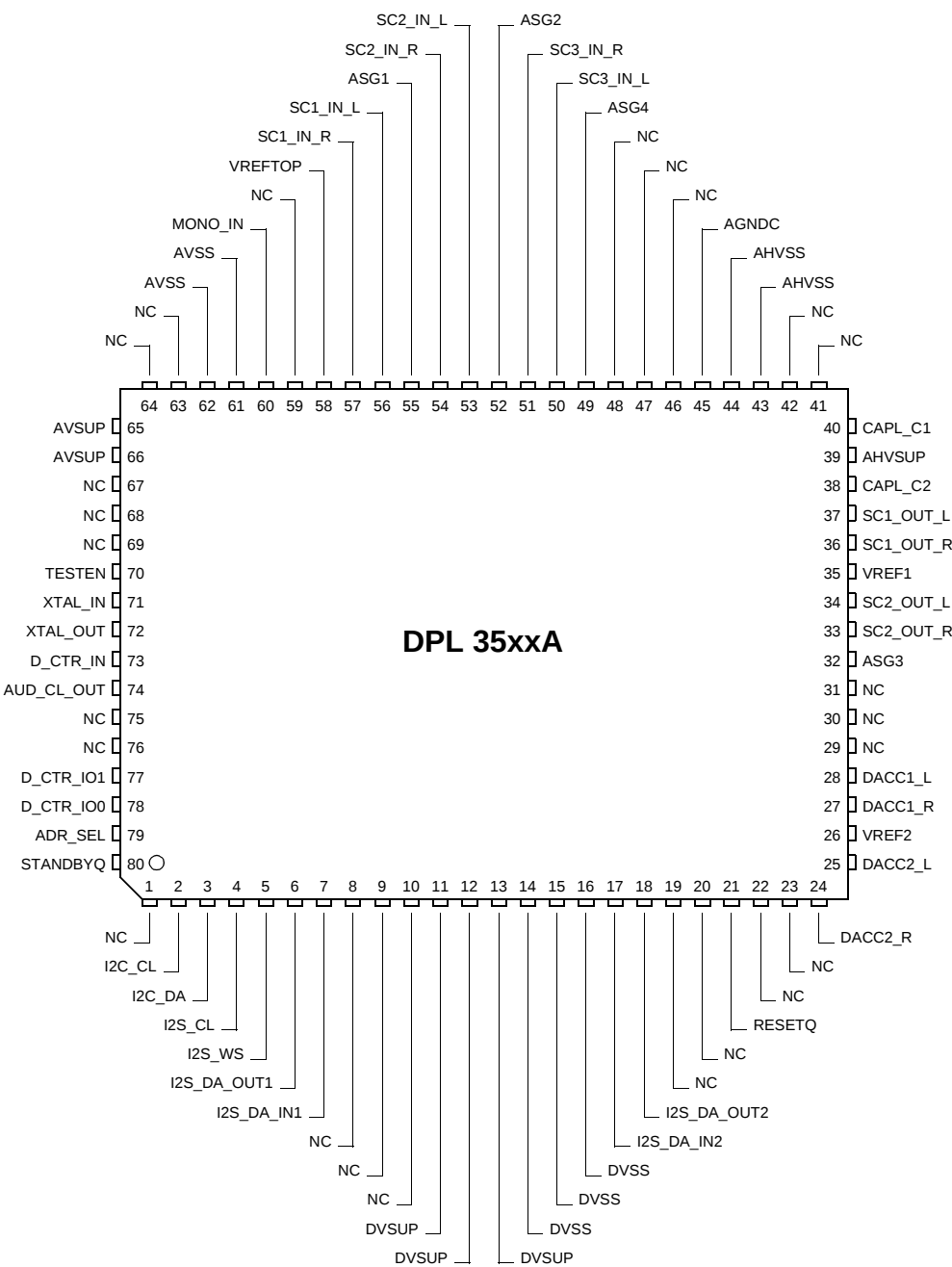


Fig. 1–2: 80-pin PQFP package