

Questions & Answers

1. What size substrate wafers are the GFE?
2" or 3"
2. Can we pick the n- & p- dopants? Or are specific ones requested?
Dopant is optional requirement. The service provider can choose dopant.
3. Is there a unusual or specific metal desired for the metallization?
Standard microelectronics metallization such as aluminum is OK. Service provider can choose metal.
4. Provide further details on 'automatic doping control'. Do you require characterization feedback during growth? Or is flux control sufficient automation?
Flux control with beam equivalent pressure is fine. Hall effect measurement after growth is recommended.
5. Is RHEED a sufficient for in situ epi-layer characterization?
RHEED with growth rate (peak oscillation) monitoring is good. Other characterizations can be added as well.
6. 60 wafers in 6 mos. works out to about a wafer every other day. Will the wafers come in batches? (i.e., just InAs requested one week, with GaP the next) Or will all 'chemistries' need to be produced concurrently? Also, there are 8 'chemistries' listed, which is not evenly divisible into 60. Can you provide a breakdown on numbers of wafers for each type?
Similar alloys of the same group (for example, AlGaInAs is one group, and AlGaInP is another group) will be grown sequentially without changing effusion cells frequently.
The number of wafers, alloy composition, and layer structures will be discussed after the contract is made.